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MEMORANDUM

Division of Water Program Coordination
Office of Water Permit Programs

SUBJECT: GUIDANCE MEMORANDUM 01- 2026
Pretreatment Program Guidance Manual

TO: Regional Directors

FROM: Larry G. Lawson, P.E. 

DATE: November 15, 2001

COPIES: Regional Permit Managers, Regional Water Permit Managers, Regional Compliance and Enforcement Managers, Pretreatment Coordinators, Martin Ferguson, Mary Jo Leugers, David Paylor, Dale Phillips

The Pretreatment Program Implementation Guidance Manual was revised October 1, 2001, and approved on November 5, 2001 during a conference call with the SMT.

Virginia DEQ received delegation to administer the pretreatment program from EPA, Region 3, on April 14, 1989. The most recent changes to the Federal Regulations affecting Pretreatment occurred in 1997, which were then incorporated in the Virginia State Regulations in 1998. With these changes, the Virginia Regulations are identical to the Federal Regulations with the exceptions of the program implementation time frame in 9 VAC 25-31-800.B.) The DEQ's authority to apply and enforce pretreatment requirements and standards is provided by the State Water Control Law 62.1-44.2 et. seq. of the Code of Virginia (1950) and Virginia Regulation 9 VAC 25-31-730 through 900.

This October 1, 2001 manual supercedes all previous manuals. The manual is distributed electronically and is available in PDF format on DEQNET (follow the water division links to VPDES permits and then Pretreatment). The manual will continue to be updated electronically as new information becomes available. All regional and central office staff in the VPDES Program and others who interact with the VPDES program staff will be notified of any updates as they occur.

DISCLAIMER

This document provides procedural guidance to the permit staff. This document is guidance only. It does not establish or affect legal rights or obligations. It does not establish a binding norm and is not finally determinative of the issues addressed. Agency decisions in any particular case will be made by applying the State Water Control Law and the implementation regulations on the basis of the site-specific facts when permits are issued.

**VIRGINIA DEQ PRETREATMENT
PROGRAM PROCEDURES MANUAL**

September 30, 2001

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PREFACE

This manual is compiled for use by DEQ personnel working with the pretreatment program. It is designed to set forth in an organized fashion the steps necessary for approval, modification, implementation and oversight of Publicly Owned Treatment Works (POTW) pretreatment programs.

Periodic updates of the manual will be made and new or revised pages will be provided as necessary. If further guidance is needed, personnel are encouraged to refer to the applicable guidance documents listed in [Appendix A](#).

1.0 BACKGROUND

Sewage treatment plants are typically designed to treat the conventional pollutants that are contained in the sanitary wastewater discharged by homes, offices, stores and factories. They are generally not designed to treat the toxic, hazardous and concentrated pollutants discharged as a result of industrial manufacturing processes.

Congress wrote pretreatment requirements into the Clean Water Act. Pretreatment is the treatment of industrial wastewater at the industrial facility itself, before the wastewater is discharged into the local sewer system.

The objectives of the National Pretreatment Program are to prevent introduction of pollutants into POTWs which will cause interference or pass through the treatment works; to improve opportunities for recycling and reclaiming wastewater and biosolids; and to protect the health and safety of POTW workers. The protection is achieved by regulating the non-domestic user of the municipal treatment works, commonly called industrial users or indirect dischargers.

DEQ is responsible for approving, monitoring and regulating the performance of local pretreatment programs.

2.0 DEFINITIONS AND ACRONYMS

2.1. DEFINITIONS

The following definitions are taken directly from the VPDES Regulations (9VAC 25-31-10), unless otherwise noted, and may be a useful reference.

Approval Authority – means the Director of the Department of Environmental Quality.

Approved POTW Pretreatment Program(s) – means a program administered by a POTW that meets the criteria established in Part VII of the VPDES Permit Regulation which has been approved by the Director or by the Administrator in accordance with 9 VAC 25-31-830.

Approved program or approved State - is a state or interstate program which has been approved or authorized by EPA under 40 CFR Part 123 (1999).

Categorical Industrial User – Any user subject to a Federal Effluent Guideline published by the EPA under section 304(b) of the Clean Water Act (9 VAC 25-31-30).

Conditional Pretreatment Program – A program that contains the required program elements but lacks the necessary funding and personnel (9 VAC 25-31-810.C).

Control Authority - The POTW, if the POTW's submission for its pretreatment program, as defined in 9 VAC 25-31-10, has been approved in accordance with the requirements of 9 VAC 25-31-830, or the Director if the submission has not been approved (9 VAC 25-31-840).

Dilution – as referenced in 9 VAC 25-31-780, means the unauthorized and intentional increase in process water or other attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with a pretreatment standard or requirement by an industrial user.

Existing Source – means any source that is not a new source or a new discharger.

Indirect Discharge – means the introduction of pollutants into a POTW from any non-domestic source regulated under Section 307(b), (c), or (d) of the CWA and the Law.

Industrial User – means a source of Indirect Discharge.

Interference – means an indirect discharge which, alone or in conjunction with an indirect discharge or discharges from other sources, both:

1. Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge disposal; and
2. Therefore is a cause of violation of any requirement of the POTW's VPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent state or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including state regulations contained in any state sludge management plan prepared pursuant to Subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

New Source - means when used in Part VII of the VPDES Permit Regulation, any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed Pretreatment Standards under Section 307(c) of the CWA which will be applicable to such source if such Standards are thereafter promulgated in accordance with that section, provided that:

1.
 - a. The building, structure, facility or installation is constructed at a site which no other source is located; or
 - b. The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or
 - c. The production of wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source should be considered.
2. Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility or installation meeting the criteria of paragraphs 1.b., or 1.c. of this definition but otherwise alters, replaces, or adds to existing process or production equipment.
3. Construction of a new source as defined under this paragraph has commenced if the owner or operator has:
 - a. Begun, or caused to begin as part of a continuous onsite construction program:
 - (1) Any placement, assembly, or installation of facilities or equipment; or
 - (2) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
 - b. Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.

Pass Through – means a discharge which exits the POTW into state waters in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's VPDES permit (including an increase in the magnitude or duration of a violation).

Pretreatment – means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or

otherwise introducing such pollutants into a POTW. The reduction or alteration may be obtained by physical, chemical or biological processes, process changes or by other means, except as prohibited in Part VII of the VPDES Permit Regulation. Appropriate technology includes control equipment, such as equalization tanks or facilities, for protection against surges or slug loadings that might interfere with or otherwise be incompatible with the POTW. However, where wastewater from a regulated process is mixed in an equalization facility with unregulated wastewater or with wastewater from another regulated process, the effluent from the equalization facility must meet an adjusted pretreatment limit calculated in accordance with Part VII.

Pretreatment Standard – means prohibited discharge standards, categorical pretreatment standards, and local limits (EPA Model Pretreatment Ordinance). National Pretreatment Standard or Standard means, when used in Part VII of the VPDES Permit Regulation, any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and (c) of the CWA, which applies to Industrial Users. This term includes prohibitive discharge limits established pursuant to 9 VAC 25-31-770.

Publicly Owned Treatment Works (POTW) – means a treatment works as defined by Section 212 of the CWA, which is owned by a state or municipality (as defined by Section 502(4) of the CWA). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in Section 502(4) of the CWA, which has jurisdiction over the Indirect Discharges to and the discharges from such a treatment works.

Note: In this manual, the term POTW may also apply to Service Authorities since they often will develop and implement pretreatment programs for one or more POTWs.

Significant Industrial User (SIU) – means, except as provided in paragraph 3 of this definition:

1. All industrial users subject to Categorical Pretreatment Standards under 9 VAC 25-31-780 and incorporated by reference in 9 VAC 25-31-30; and
2. Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater); contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority, as defined in 9 VAC 25-31-840 A., on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.
3. Upon finding that an industrial user meeting the criteria in paragraph 2 of this definition has not reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the control authority may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with Part VII of the VPDES Permit Regulation, determine that such industrial user is not a significant industrial user.

Slug Discharge – as defined in 9 VAC 25-31-800.F.2.e means any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or non-customary batch discharge.

2.2. ACRONYMS

The following acronyms are often seen within the regulation and general pretreatment literature:

BMR – Baseline Monitoring Report
CEDS – Comprehensive Environmental Data System
CIU – Categorical Industrial User
CWA – Clean Water Act
CWF – Combined Wastestream Formula
CSO – Combined Sewer Overflow
DEQ – Department of Environmental Quality
EPA – Environmental Protection Agency
ERP – Enforcement Response Plan
FDF - Fundamentally Different Factor Variance
GPD – Gallons Per Day
IU – Industrial User
IIA – Interjurisdictional Agreement
IWS – Industrial Waste Survey
MGD – Million Gallons per Day
NPDES – National Pollutant Discharge Elimination Systems
P2 – Pollution Prevention
PCS – Permit Compliance System
PPETS – Pretreatment Permits and Enforcement Tracking System
PSES – Pretreatment Standards for Existing Source
PSNS – Pretreatment Standards for New Source
POTW – Publicly Owned Treatment Works
QNCR – Quarterly Non-compliance Report
RNC – Reportable Noncompliance
SIU – Significant Industrial User
SNC – Significant Noncompliance
SUO – Sewer Use Ordinance
TTO – Total Toxic Organics
VPDES – Virginia Pollution Discharge Elimination Systems

3.0 AUTHORITY

3.1 GENERAL

The Virginia DEQ received delegation to administer the pretreatment program from the Environmental Protection Agency (EPA), Region 3, on April 14, 1989 (Appendix B). The terms of this approval are outlined in a Memorandum of Agreement signed April 12, 1989 (Appendix C). The DEQ's authority to apply and enforce pretreatment requirements and standards is provided by the State Water Control Law 62.1-44.2 et. seq. of the Code of Virginia (1950) and Virginia Regulation 9 VAC 25-31-730 through 900.

DEQ has both Control Authority and Approval Authority responsibilities. DEQ serves as the Approval Authority for POTWs with approved programs and the Control Authority for the rest of the State. By letter dated January 29, 1991 EPA has waived their review of pretreatment program requirements in Virginia (Appendix D).

The Regional Offices carry out the approval and oversight activities to ensure the POTWs are implementing the approved program's standards and requirements. The Central Office develops regulations, provides guidance and support, performs QA/QC audits, and serves as liaison with EPA.

3.2 FEDERAL STATUTORY AUTHORITY

EPA's Pretreatment Policy and the General Pretreatment Regulations are based upon the Federal Water Pollution Control Act Amendments of 1972 as amended by the Clean Water Act (CWA) of 1977, (Public Law 95-217) 33 U.S.C. 1251 et. seq. and the Water Quality Act of 1987.

The Clean Water Act was meant "to restore and maintain the chemical, physical and biological integrity of the Nation's waters" by establishing as a national goal the elimination of the discharge of pollutants into the navigable waters by 1985. A major emphasis for attainment of this goal was placed upon technology-based regulations. Industries which discharge into waters of the United States were required to achieve limitations based on Best Practicable Control Technology Currently Available (BPT) by March 1, 1985 and Best Available Technology Economically Achievable (BAT) by March 1, 1985, in accordance with Sections 301 and 304. New sources are required to comply with New Demonstrated Control Technology (BDT) under Section 306. POTWs were obliged to meet "secondary treatment" by 1977 and Best Practicable Waste Treatment Technology (BPWTT) by 1983, in accordance with Sections 301(b), 304(d) and 201(g)(2)(A) of the Clean Water Act, Pretreatment Standards and any other requirements promulgated pursuant to Section 307 [see Section 301(b)(2) A(ii)].

Sections 307(b)-(d) are the key sections of the 1972 Act in terms of pretreatment.

Section 307(b) requires the EPA administrator to promulgate regulations establishing pretreatment standards for the introduction of pollutants by existing sources into POTWs. Pretreatment standards promulgated under Section 307(b) must be established to prevent the discharge of any pollutant which interferes with the POTW (or contaminates its sludge), passes through or otherwise is "incompatible" with the POTW.

Section 307(c) requires the Administrator to promulgate pretreatment standards for a source that would be a new source subject to Section 306 if it were to discharge pollutants into waters of the United States.

These regulations must be promulgated simultaneously with the promulgation of standards of performance under Section 306.

New source pretreatment standards must be designed to prevent the discharge of any pollutant into the POTW that may interfere with, pass through, or otherwise be incompatible with the operation of the works, including sludge use or disposal.

Under Section 307(d), it is unlawful to operate a new or existing source in violation of a pretreatment standard promulgated under Sections 307(b) and (c). Violations of Section 307(d) are subject to enforcement actions brought by the EPA (under Section 309) against both the POTW and the industrial user who is in violation.

The CWA amendments of 1987 reflect a congressional consensus that the approach discussed above is sound and, with modifications to ensure that special emphasis on the control of toxic pollutants, should be continued. The CWA has added several new provisions relevant to pretreatment. Section 307(b)(1) was amended to allow for local modification of National Categorical Pretreatment Standards to take into account the actual pollutant removal capabilities of particular POTWs. Section 402(b)(1) was amended to allow for local modification of National Categorical Pretreatment Standards to take into account the actual pollutant removal capabilities of particular POTWs. Section 402(b)(8) was amended to provide that any NPDES permit issued to a POTW should include a permit condition requiring identification of pollutants from significant industrial users and instituting an adequate local program to ensure compliance by users with National Pretreatment Standards. Finally, Section 405 was amended to expand the guideline provisions relating to the disposal of sewage sludge which shall be subject to the requirements of Section 402 of the Clean Water Act.

In the Water Quality Act of 1987, Section 307 of the Act was modified to provide a 2-year extension for compliance with categorical pretreatment standards for existing, but not new, facilities using an innovative system that meets the requirements of Section 301(J). The innovative process must have potential for industry-wide application. No facility that receives an extension can cause or contribute to any violation of discharge permit or sludge disposal provisions of the Act.

3.3 REGULATORY OVERVIEW - 40 CFR PART 403 AND VIRGINIA PERMIT REGULATION

On February 2, 1977, EPA proposed a rule which would establish mechanisms and procedures for enforcing national pretreatment standards controlling the introduction of wastes from non-domestic sources into POTWs. On June 26, 1978, after more than a year of consideration, the Agency promulgated the final General Pretreatment Regulations, 40 CFR Part 403 (43 FR 27736-27773). Following the promulgation of the General Pretreatment Regulations, several actions were brought in federal court challenging various aspects of these regulations. On January 28, 1981, the EPA promulgated amendments to the General Pretreatment Regulations and reprinted the entire text of 40 CFR 403 (46 FR 9404-9460). The last changes to the Federal Regulations occurred in 1997 and were incorporated in the Virginia Regulations in 1998. With these changes, the Virginia Regulations are identical to the Federal Regulations with the exception of the program implementation time frame (9 VAC 25-31-800.B).

3.4 EFFECT OF THE GENERAL PRETREATMENT REGULATION

The general pretreatment regulations establish the overall framework for implementation of the National Pretreatment Strategy. The effects of these regulations are essentially three fold.

First, Section 403.5 of the Federal Regulations (9 VAC 25-31-770. A.1 of the Virginia Permit Regulation) sets forth general discharge prohibitions that apply to all non-domestic users of a POTW. The intent of these general limitations is: (1) to prevent interference with the operation of the treatment works; (2) to prevent pass-through of pollutants resulting in violation of the POTW's NPDES permit limitations; and (3) to prevent municipal sludge contamination.

Second, the regulations, primarily through Sections 403.8-11 of the Federal Pretreatment Regulations (9 VAC 25-31-[800-830] of the Virginia Permit Regulation), establish an administrative mechanism to ensure that the general discharge prohibitions, as well as Categorical Pretreatment Standards, are applied and enforced. The regulations envision three levels of administrative control: local POTWs, states, and EPA. Most major POTWs are required to develop a locally run pretreatment program to ensure that non-domestic users of the municipal system comply with applicable pretreatment requirements. Where POTWs are not required to develop a local program, NPDES states with approved pretreatment programs will be responsible for enforcing pretreatment requirements. EPA will have responsibility for oversight of both state and POTW pretreatment program activities.

Third, the General Pretreatment Regulations contain provisions that address the determination of appropriate categorical pretreatment standards to be applied and reporting requirements applicable to industrial users.

40 CFR Part 403 (9 VAC 25-31-[730-900]) contains the General Pretreatment Regulations and 40 CFR, Sections 405 – 471, contains the specific effluent guidelines and standards that are used in development and implementation of a pretreatment program. These parts are incorporated into the Virginia Regulation by reference in Section 9 VAC 25-31-30. A full listing of these guidelines and standards are included in [Appendix E](#).

4.0 PRETREATMENT PROGRAM RESPONSIBILITIES

4.1 APPROVAL AUTHORITY (VIRGINIA DEQ)

1. Provide assistance to POTWs in developing and/or implementing their pretreatment program.
2. Identify/verify POTWs required to develop local pretreatment programs.
3. Ensure the proper pretreatment special conditions are included in the VPDES permit.
4. Approve/deny POTW pretreatment program submissions.
5. Ensure public notice of pretreatment program approvals are met per 9 VAC 25-31-830.B.
6. Make industrial categorical (user) determinations in accordance with 9 VAC 25-31-780.A.1.
7. Make Fundamentally Different Factor Variance determinations in accordance with 9 VAC 25-31-850.
8. Review and/or assist control authority with net/gross determinations in accordance with 9 VAC 25-31-870.
9. Perform yearly audit of the POTWs with approved programs. Document to the POTW any program deficiencies found during the audit.
10. Submit quarterly 106 Grant Reports to the Central Office Pretreatment Coordinator by the tenth of January, April, July, and October.
11. Inspect SIUs to verify compliance with POTW permit requirements.
12. Initiate enforcement action against POTWs for violation of the pretreatment requirements of their VPDES permits.
13. Track the POTW's VPDES permit requirements and compliance schedule milestones to ensure that schedules for the submission of a program are met.
14. Maintain files in an orderly accessible form.
15. Evaluate annual reports from the POTWs and transmit deficiency letters to the POTW, as necessary, per 9 VAC 25-31-840.I.
16. Provide summaries of the POTW annual reports to Central Office Pretreatment Coordinator by March 15th.
17. Maintain Agency Database (i.e. CEDS).

4.2 CONTROL AUTHORITY (POTW OR DEQ)

1. Identify and locate all industrial users. Conduct and/or update IU survey using Industrial Waste Survey form or equivalent.
2. Develop and implement pretreatment program legal authority in accordance with 9 VAC 25-31-800.F.1.
3. Develop and implement pretreatment program procedures in accordance with 9 VAC 25-31-800.F.2.
4. Ensure adequate resources to implement the program.
5. Meet public notice requirements in accordance with 9 VAC 25-31-10, Part VII.
6. Develop local limits to control discharges from SIUs in accordance with 9 VAC 25-31-10, Part VII.
7. Develop and implement an ERP.
8. Properly categorize IUs in accordance with 9 VAC 25-31-10, Part VII.
9. Notify SIUs of their responsibility to comply with the pretreatment standards and requirements.
10. Notify the IUs of the RCRA requirements per 9 VAC 25-31-800.F.2.C.
11. Issue permits to Significant Industrial Users.
12. Require, at a minimum, twice a year reporting for all permitted SIUs.
13. Require appropriate monitoring, sampling and analysis from SIUs.
14. Enforce against IU violations of pretreatment standards and conditions in accordance with the approved ERP and 9 VAC 25-31-10, Part VII.
15. Inspect and sample the SIUs in accordance with 9 VAC 25-31-10, Part VII.
16. Evaluate the need for a Slug Control Plan by the SIUs once every two years.
17. Receive and review SIUs Slug Control Plans.
18. Submit annual report signed in accordance with 9 VAC 25-31-840.I. & M.
19. Reevaluate local limits in accordance with the POTWs' permit requirements.
20. Maintain records for a minimum of three years.
21. Modify program in accordance with 9 VAC 25-31-900 as necessary.

4.3 SIGNIFICANT INDUSTRIAL USERS (INCLUDING CATEGORICAL INDUSTRIAL USERS)

Note: All non-domestic users are subject to the pretreatment regulations.

1. When requested or required by local SUO, make application to the control authority for determination of SIU status.
2. Comply with the prohibitive, general, applicable categorical standards, and local limits developed by the POTW in accordance with 9 VAC 25-31-10, Part VII.
3. If subject to categorical standards, comply with the requirements specified in the applicable category and submit the following reports: BMR, 90-day Compliance report, periodic compliance report, notice of slug loads, and other reports specified in the regulations and permit (Section 9 VAC 25-31-840.B-G).
4. Meet the requirements of the permit issued by the POTW including provisions of 9 VAC 25-31-840.
5. Conduct all sampling and analysis performed for permit compliance in accordance with 40 CFR Part 136 (9 VAC 840.B.5.f).
6. Construct facilities necessary to comply with the pretreatment requirements.
7. Report on all instances of violations within 24 hours of becoming aware of the violation and conduct resampling and analysis, where appropriate (Section 9 VAC 25-31-840.G.2).
8. Notify the control authority (POTW) of the discharge of a substance, which, if otherwise disposed of, would be a hazardous waste (Section 9 VAC 25-31-840.P).
9. If subject to mass or production-based limits report production levels (Section 9 VAC 25-31-840.E.3.) and changes in production levels that will impact the permit limits (Section 9 VAC 25-31-780.C.7).
10. Sign and certify all applications and reports (Sections 9 VAC 25-31-780.A.2.b. and 9 VAC 25-31-840.L).
11. Immediately notify the control authority of potential problems including slug loads (Section 9 VAC 25-31-840. F).
12. Maintain records for a minimum of three years (Section 9 VAC-25-31-840.O).
13. Request categorical variances in a proper manner (Section 9 VAC-25-31-850).
14. Claim as confidential only trade secrets (Section 9 VAC 25-31-860). Effluent data cannot be claimed as confidential.

4.4 ENVIRONMENTAL PROTECTION AGENCY

1. Develop National Categorical Pretreatment Standards that apply to particular industrial process and contain specific discharge limits;
2. Develop regulations that prohibit the discharge of pollutants by all non-domestic sources which may interfere with the operation of the municipal treatment facility or pass-through those facilities untreated into adjacent water bodies;
3. Write regulations that establish criteria and procedures for the development, approval and implementation of local pretreatment programs;
4. Issue guidance documents and conduct training seminars in order to help municipal treatment facilities and control authorities understand, develop, and implement effective pretreatment programs;
5. Delegate authority to implement pretreatment programs; and
6. Review and audit DEQ's oversight of pretreatment programs.

5.0 VIRGINIA PRETREATMENT PROGRAM PROCEDURES

5.1 ELEMENTS OF A PRETREATMENT PROGRAM

The six basic elements of a pretreatment program, as outlined in (9 VAC 25-31-800.F.1.a-g.), are summarized below:

1. Legal Authority (9 VAC 25-31-800.F.1.a-g) - The legal authority authorizes or enables the POTW to apply and to enforce the requirements of Sections 307(b,c & d) and 402(b)(8) of the CWA, and any regulations implementing these sections. Such authority is usually contained in statutes, ordinances, rules, and regulations which the POTW is authorized to enact, enter into, or implement, and which are authorized by state law. This authority may also include interjurisdictional agreements (IJA) with other service areas. The legal authority allows the POTW to control or limit discharges into its collection system by providing authority for: issuance of permits, establishment of local limits, inspection and sampling of industrial users, compliance monitoring, and enforcement.

Note: Boilerplate or standard permit language is typically submitted and reviewed as part of the pretreatment program and can be regarded as part of the legal authority and/or procedures. At a minimum, it must contain the six items listed in 9 VAC 25-31-800.F.1.c.
2. Procedures (9 VAC 25-31-800.F.2.a-g) - Procedures provide POTWs with a means of ensuring compliance with the requirements of a pretreatment program. Among other things, they specify means of identifying SIUs, characterizing pollutants, notifying users of pretreatment and RCRA obligations, issuing discharge permits, processing SIU self monitoring reports, inspecting and sampling industrial users, investigating noncompliance with permit requirements, and public noticing SIUs in SNC. Boilerplate language for permits issued to industrial users is considered part of the procedures and/or legal authority.
3. Funding and Resources (9 VAC-25-31-800.F.3) – Adequate funding and resources are essential for carrying out the authorities and procedures described in number 1 and 2 above. Pretreatment needs typically include such things as pretreatment personnel, vehicles, sampling equipment, training, etc. Program organization and staffing should be addressed under this element. Under certain circumstances, a POTW may be allowed to delay full funding as long as the key elements of the program can be implemented. This is known as conditional program approval and is covered more in Section 5.5.
4. Local Limits (9 VAC 25-31-800.F.4) - Local limits are derived and used by the POTW for preventing pollutants from interfering with the POTW operation, endangering POTW operators, passing through to receiving waters, or degrading sludge and effluent quality. Limits can be derived in a number of ways and are normally based upon sampling of influent, effluent, and sludge. In some cases, the technical evaluation may reveal that local limits are not necessary (9 VAC 25-31-770.C.4).
5. Enforcement Response Plan (ERP) (9 VAC 25-31-800.F.5) - An ERP outlines procedures that a POTW will follow to investigate and respond to instances of industrial user noncompliance. Without a strong ERP, it can be difficult for pretreatment staff to determine how to bring industrial users back into compliance and to ultimately meet the goals of the pretreatment program.
6. Significant Industrial User List (9 VAC-25-31-800.F.6) – Although identification of SIUs is often the determining factor for program development, frequent monitoring and updating of

the list is necessary in order to ensure that the program is being fully implemented and that it regulates all appropriate users. Industrial Waste Surveys (IWS), drive by inspections, and good relationships with jurisdictional approval authorities are just a few of the means used for finding new SIUs.

5.2 CRITERIA USED BY DEQ TO EVALUATE THE NECESSITY OF PROGRAM DEVELOPMENT

The DEQ Regional Office is responsible for determining which POTW need to develop pretreatment programs and inserting special conditions into the corresponding VPDES permits to initiate the process. In general, POTWs are required to develop pretreatment programs when the following conditions apply (9 VAC 25-31-800.A):

1. A POTW (or combination of POTWs operated by the same authority) has a total design flow greater than 5 million gallons per day (MGD) **and**
2. Receives from Industrial Users pollutants which:
 - a. Pass Through or Interfere with the operation of the POTW **or**
 - b. Are otherwise subject to Pretreatment Standards

unless the Director exercises his or her option to assume local responsibilities.

The Director (DEQ) may require that a POTW with a design flow of 5 MGD or less develop a POTW Pretreatment Program if it is found that the nature or volume of the industrial influent, treatment process upsets, violations of POTW effluent limitations, contamination of municipal sludge, violations of water quality standards, or other circumstances warrant in order to prevent Interference with the POTW or Pass Through (9 VAC 25-31-800.A).

Note: It is recommended that POTWs with design flows greater than or equal to 40,000 GPD conduct an IU survey and be evaluated for Pretreatment programs. The 40,000 flow figure has been a standard in Agency practice and is consistent with the increased operator oversight and testing requirements provided by VDH at this flow, as established in the Virginia Sewerage Regulations.

5.3 PRETREATMENT PROGRAM SUBMISSION

(The following language corresponds to the top 4 boxes in Flow Chart 5.4)

The POTW must begin to develop a Pretreatment Program at either permit issuance or upon notification from DEQ (9 VAC 25-31-800.B). The program must be based on the legal authority and include the elements listed in Section 5.1. For a detailed explanation of the submittal requirements, see Appendix F.

Within 1 year (9 VAC 25-31-800.B) of permit issuance, or notification by DEQ that a Pretreatment Program is required, the POTW shall submit three copies (9 VAC 25-31-810.E) of all elements (9 VAC 25-31-810.B., and if appropriate, 9 VAC 25-31-810.D) of the program to DEQ. Appendix F should be referenced for a checklist of required program elements.

Note: The regulations require submittal of three copies of the program submission. In discussions with EPA during March 2001, it was determined that in most cases only one copy is needed for regional review. Following DEQ regional program approval, a copy of the final program should be forwarded to the DEQ Central Office. In situations where Central Office or EPA is involved in the review process, the POTW should be informed that they need to submit additional copies.

5.4 APPROVAL PROCEDURES FOR A NEW PRETREATMENT PROGRAM

(The following language corresponds to boxes 1-15 of Flow Chart 5.4)

1. Within 60 days (9 VAC 25-31-810.E) of receiving the Pretreatment Program submission, DEQ shall make a preliminary determination of whether the submission meets the requirements of 9 VAC 25-31-810.B.1-4, and if appropriate, 9 VAC 25-31-810.D. The review is to determine completeness of the submission, not whether the elements of the submission are approvable. This is sometimes referred to as an administrative review.

NOTE: It is recommended that the Regional Office try to concurrently perform both the technical and administrative review as outlined in Item 5 below. In doing so, DEQ can proceed to public notice with a program that is believed to be approvable and can forego a public notice of an incomplete submission. Further, it is likely that the POTW will submit the different elements of its program at different times for review and staff should perform a complete and timely review for each element. A very typical scenario is the POTW will submit a draft SUO early so that they can have it in place to perform their SIU Survey. However, adoption of the legal authority is necessary before the program can be considered complete and public noticed.

- 2-4. DEQ shall make a preliminary determination that the Pretreatment Program submission meets the requirements of 9 VAC 25-31-810.B.1-4 (all items have been submitted). If any of the required elements of the program are not submitted, proceed to item 12. If the Pretreatment Program submission is considered complete, DEQ shall notify the POTW that their submission (all required parts) has been received and is under review (9 VAC 25-31-810.E.1). A boilerplate letter to the POTW is included in [Appendix \(G\)](#). Within 20 working days of Item 3 DEQ shall commence the public notice for program approval and continue the evaluation process. Details on the public notice procedure and additional mailings are in 9 VAC 25-31-830.B.1.a and a listing of addresses can be found in [Appendix I](#)). The form for the POTW to authorize public notice should be included with the notification letter (Flow Chart, Item 3). The boilerplate authorization form and public notice form are also in [Appendix G](#). After receipt of the authorization form from the POTW, the public notice shall be sent to the newspaper (9 VAC 25-31-810 E.2). A boilerplate cover letter to the newspaper and verification form are included in [Appendix G](#). Once the notice has been published, the newspaper should provide verification of publication and a copy of the notice.

Note: The public notice of intent to approve a pretreatment program only has to be public noticed one time. The public notice should also be sent to DEQ CO for posting on the DEQ Webpage.

5. Deadline for Review of Submission - DEQ has 90 days from the date of public notice to review the Submission for compliance with the requirements of 9 VAC 25-31-800.B and F. This is sometimes referred to as a technical review. (The checklist in [Appendix F](#) should be used to review the submittal). DEQ may have up to an additional 90 days to complete the evaluation of the Submission if the public comment period is extended beyond 30 days or if a public hearing is held. (9 VAC 25-31-830.A). In no event shall the time for the evaluation of the Submission exceed a total of 180 days from the date of public notice (9 VAC 25-31-830.A).

6. The public notice provides for a 30-day comment period (9 VAC 25-31-830.B.1.b) from interested parties. DEQ may extend the comment period if warranted (830.B.1.c). A public hearing can be requested by interested parties or the POTW during the 30-day comment period (9 VAC 25-31-830.B.2). A response should be sent to all people that submit comments. If the public's concerns cannot be resolved, if there are a significant number of comments, or if a public hearing is requested, a public hearing may be warranted. If a public hearing is warranted, it must be public noticed in the same newspaper(s) as the notice of the original request (for approval of the Pretreatment Program submission, 9 VAC 25-31-830.B.2.c). The Regional Director must make the decision of whether to hold a public hearing. If a public hearing is warranted, the procedures for public hearings in the VPDES Permit Writers Manual shall be followed.

Although EPA has waived their program review role via a letter dated January 29, 1991 ([Appendix D](#)), they still may request a copy of the program for review from time to time. If EPA objects to approval of the program, a public hearing may also be convened. Unless retracted, EPA's objections shall constitute a final ruling to deny approval of a POTW pretreatment program or authorization to grant removal allowances 90 days after the date the objections are issued (9 VAC 25-31-830.D.).

7. After consideration of public comments, the submission can be approved (9 VAC 25-31-830.C). If the submission is disapproved, go to Item 12.
8. To complete the approval process, the director shall cause to be published a notice of approval in the same newspaper(s) as the original notice of request for approval (9 VAC 25-31-830.E). An example letter, draft public notice and authorization form can be found in [Appendix G](#). When the authorization is received, send a copy along with a cover letter and verification form to the newspaper. There is no comment period for this notice. This public notice is to inform the public that the program has been approved. The public's chance for comment on the program occurred during the first notice.

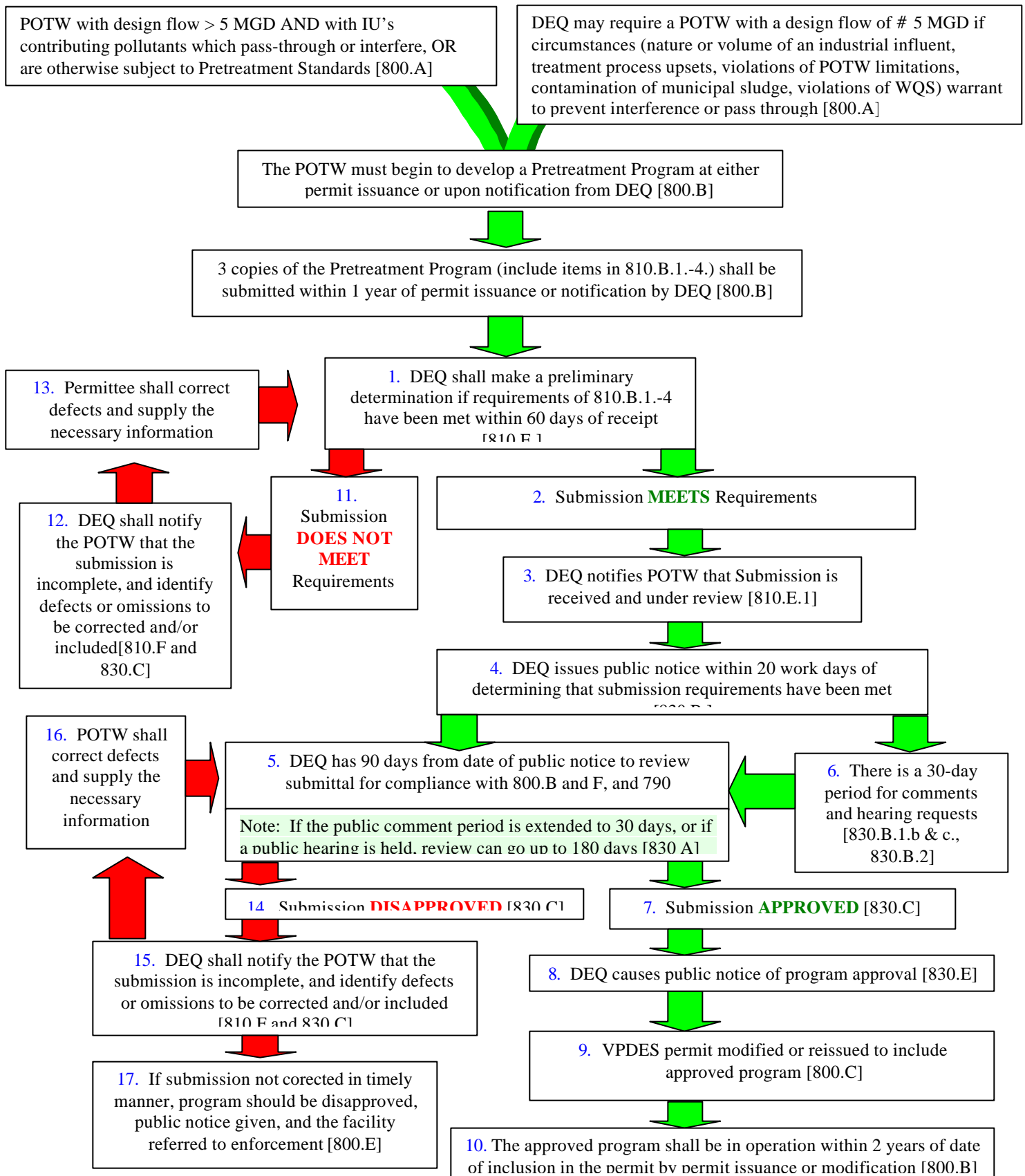
Note: In some cases, when the approval occurs close to a VPDES permit reissuance, the permit writer may be able to combine the program approval notification with the VPDES permit issuance public notice.

9. The POTW's VPDES permit will be revoked and reissued, or modified to incorporate the approved Pretreatment Program as enforceable conditions of the permit (9 VAC 25-31-800.C). The modification of a POTW's permit for the purposes of incorporating a POTW Pretreatment Program approved in accordance with the procedures in 9 VAC 25-31-830 is normally deemed a minor permit modification subject to the procedures in 9 VAC 25-31-400. Regional permitting staff should be notified of the need to modify the permit. It may be necessary to modify multiple permits if the program covers more than one POTW. Public notice of the POTW's VPDES Permit modification is not required if the change is processed as a minor modification, however, it should be noted that the final program approval must be public noticed as outlined in Item 8 above.
10. The approved program shall be in operation within two years of the effective date of the permit, or the date of inclusion in the permit by modification (9 VAC 25-31-800.B).

11. If any of the necessary elements of the Pretreatment Program were not submitted, then the submission does not meet requirements of 9 VAC 25-31-810.B.1-4 (9 VAC 25-31-810.F).
12. When a submission is deemed incomplete, DEQ shall notify the POTW and identify deficiencies or omissions to be corrected and/or included so that the submittal can be approved (9 VAC 25-31-810.F. and 9 VAC 25-31-830.C). If the POTW fails to provide elements within one year, it should be referred to enforcement.
13. The POTW shall correct the deficiencies and supply the necessary information for DEQ to evaluate. It is recommended that the POTW be given 30 days to respond to the deficiencies. More time may be given on a case by case basis. The review/approval process returns to Item 1 above.
14. If the Pretreatment Program submission is not acceptable, it is disapproved (9 VAC 25-31-830.C.).
15. DEQ shall notify the POTW that the submission has been disapproved and identify defects or omissions to be corrected and/or included for approval in accordance with applicable requirements. It is recommended that a time period of 30 days be given to the POTW in which to return the revised submission, however, additional time may be granted as necessary in accordance with 9 VAC 25-31-830.C. Upon receipt of revisions, return to Item 5.
16. POTW shall correct defects and supply the necessary information. Upon receipt of revisions, return to Item 5.
17. If the POTW fails to provide revisions within the specified time, the Pretreatment Program should be formally disapproved and public noticed in accordance with 9 VAC 25-31-800.E.. The POTW should then be referred to DEQ enforcement.

5.4 APPROVAL PROCEDURES FOR NEW PRETREATMENT PROGRAMS – FLOW DIAGRAM

(All regulatory citations are preceded by 9 VAC 25-31-...)



5.5 CONDITIONAL PRETREATMENT PROGRAMS

The POTW may request conditional approval of the Pretreatment Program in accordance with 9 VAC-25-31-810.C. due to a lack of funding and personnel if the following apply:

1. The program must satisfy the requirements set forth in 9 VAC 25-31-810 B and must have adequate legal authority and procedures;
2. A limited aspect(s) of the program is/are not needed immediately;
3. Funding and personnel for full implementation will be available when needed; and
4. The submission must describe when and how necessary resources will be acquired.

Upon receiving a request from a POTW for conditional approval, it is the responsibility of the regional pretreatment coordinator, with central office guidance when necessary, to determine if the program submittal meets the above criteria. If so, the submittal may be approved as a conditional program and a date set for full implementation. 9 VAC 25-31-810 C.3 states that "If funding is not acquired by this date, the conditional approval of the POTW Pretreatment Program and any removal allowances granted to the POTW may be modified or withdrawn". However, it does not state that they must be withdrawn. Therefore, the POTW may request an extension of the compliance date should it become clear that the deadline will not be met. If the POTW demonstrates that implementation by the established date is not necessary and that resources will not be available at that time, the regional office may grant such an extension. In this circumstance, it is the responsibility of the regional pretreatment coordinator to document the rationale for granting the extension (i.e. in a fact sheet or memorandum). EPA's Guidance Manual entitled "Guidance Manual for POTW Pretreatment Program Development (October 1983) – Chapter 7" may be useful for estimating program cost and documenting efforts to procure resources. Alternatively, if an extension is not justified or not a viable option, the regional office should take appropriate action to ensure full implementation in a timely manner. This may involve issuance of a formal compliance schedule to the POTW and the requirement that the POTW submit periodic progress reports.

An example of a program that might qualify as "conditional" is one which lacks the personnel or financial capability to conduct sampling, inspections, and surveillance activities, but in accordance with 9 VAC 25-31-810 B has the authority and procedures to do so.

If conditional approval is warranted, the same program approval procedures outlined in section 5.4 of this manual should be followed. However, the VPDES implementation language should be customized to reflect the program's conditional status by omitting those program aspects that are not to be implemented at this time. Consequently, this language may vary for each conditional program, depending on the situation. The date by which the remaining parts of the program will be implemented and a requirement to submit progress reports may be added to the VPDES permit implementation language and should be considered, especially when an extension of the deadline is not anticipated or appropriate.

5.6 MULTIPLE POTWS UNDER ONE AUTHORITY

By letter dated July 30, 1993, the EPA set forth the following (Appendix J):

The General Pretreatment Regulations, 40 CFR 403.8(a), (9 VAC 25-31-800.A) requires "any POTW (or combination of POTWs operated by the same authority)" to develop a pretreatment program where certain conditions exist. Where a single authority operates two or more treatment plants, the

pretreatment program must regulate all industrial discharges throughout the entire service area (i.e. all treatment plants). For this reason, one pretreatment program is approved rather than two or more separate programs.

Upon approval of the pretreatment program, the authority is required to implement the program for the entire service area. This requirement is imposed through the NPDES permit(s) of the POTW. Where the approved POTW has several treatment plants, some of which have industrial discharges and some do not, the requirement to implement the program is best included in all of the permits. POTWs with industrial users should be given the permit language in Section 7.2; POTWs without industrial users should be given the permit language in Section 7.3. This will ensure that the POTW is required to maintain an adequate inventory of its industrial users as well as regulate any users that may connect in the future.

6.0 PROGRAM MODIFICATIONS

9 VAC 25-31-900 incorporates Section 403.18 of the federal regulations. This regulation addresses substantial and non-substantial modifications. Either the Director (DEQ) or a permittee with an approved Pretreatment Program may initiate program modification at any time to reflect changing conditions at the POTW (9 VAC 25-31-900.A). When initiated by the POTW, the POTW must submit a statement of basis for the desired program modification (9 VAC 25-31-900.C.1).

Once the modification is approved, the regulations call for the VPDES permit to be modified as a minor modification. However, because the permit language for an approved program is not specific to a POTW, there is nothing to change or modify. Documentation of the POTW's modification request and DEQ's approval of the modification shall constitute compliance with 9 VAC 25-31-900.E.

6.1 SUBSTANTIAL MODIFICATIONS

1. Substantial modifications require a high level of review by the regional office. Substantial modifications include (9 VAC 25-31-900.B):
 - a. Relaxation of POTW legal authorities except those that reflect changes in the regulation;
 - b. Changes in local limits which result in less stringent requirements for industrial users, except for the modifications to local limits for pH and reallocations of the Maximum Allowable Industrial Loading of a pollutant that do not increase the total industrial loadings for the pollutant;
 - c. Changes to the POTW's control mechanism procedures described by the currently approved pretreatment program;
 - d. A decrease in the monitoring or reporting frequency prescribed by the POTW's currently approved pretreatment program documentation (please note that an individual IU's permit requirement may be adjusted at the discretion of the POTW and does not constitute a program modification for purposes of the regulation as long as such adjustment is done in accordance with the approved program procedures and requirements);
 - e. A decrease in the frequency of SIU inspections or sampling by the POTW from that prescribed in the approved pretreatment program;
 - f. Any changes to the POTW's confidentiality procedures; or
 - g. Any other changes determined significant by the Director on the basis that the modification could:
 - i. Have a significant impact on the operation of the POTW's pretreatment program.
 - ii. Result in an increase of pollutant loadings at the POTW; or

- iii. Result in less stringent requirements being imposed on IUs of the POTW.

6.2 APPROVAL PROCEDURES FOR SUBSTANTIAL MODIFICATIONS

1. DEQ shall review the proposed modification when initiated by the POTW. A written request and associated documentation must accompany the proposed modification (9 VAC 25-31-900.C.1). For modifications that affect any ordinance, rules and regulations, and/or other legal authorities relied upon for the POTW's program implementation, the request shall also contain a copy of an attorney's statement regarding the effect of this change on the POTW's ability to carry out the responsibilities of the pretreatment program in accordance with all applicable State statutory and regulatory requirements. For these types of modifications, adoption of the legal authority is necessary before the program can be considered complete and public noticed.
2. Submission meets requirements per 9 VAC 25-31-800.F. [Appendix F](#) may be helpful for this review.
3. Within 20 working days of determining that the submission requirements have been met, DEQ shall commence the public notice for modification approval and continue the evaluation process. The public notice may be performed by the permittee provided that DEQ finds that the notice otherwise satisfies the requirements (9 VAC 25-31-900.C.4). Details on the public notice procedure and additional mailings are in 9 VAC 25-31-830.B.1 and a listing of addresses can be found in [Appendix I](#). An example authorization form and public notice are also outlined in [Appendix G](#). After receipt of the authorization form from the POTW, the public notice shall be sent to the newspaper (9 VAC 25-31-810 E.2). An example cover letter to the newspaper and verification form are included in [Appendix G](#). Once the notice has been published, the newspaper should provide verification of publication and a copy of the notice.

NOTE: It is recommended that the Regional Office try to concurrently perform both the technical and administrative review as outlined in Item 7 below. In doing so, DEQ can proceed to public notice with a program that is believed to be approvable and can forego a public notice of an incomplete submission.

4. DEQ has 90 days from date of public notice to review submittal for compliance with 9 VAC 25-31-800.(B.& F) and 9 VAC 25-31-830.A.

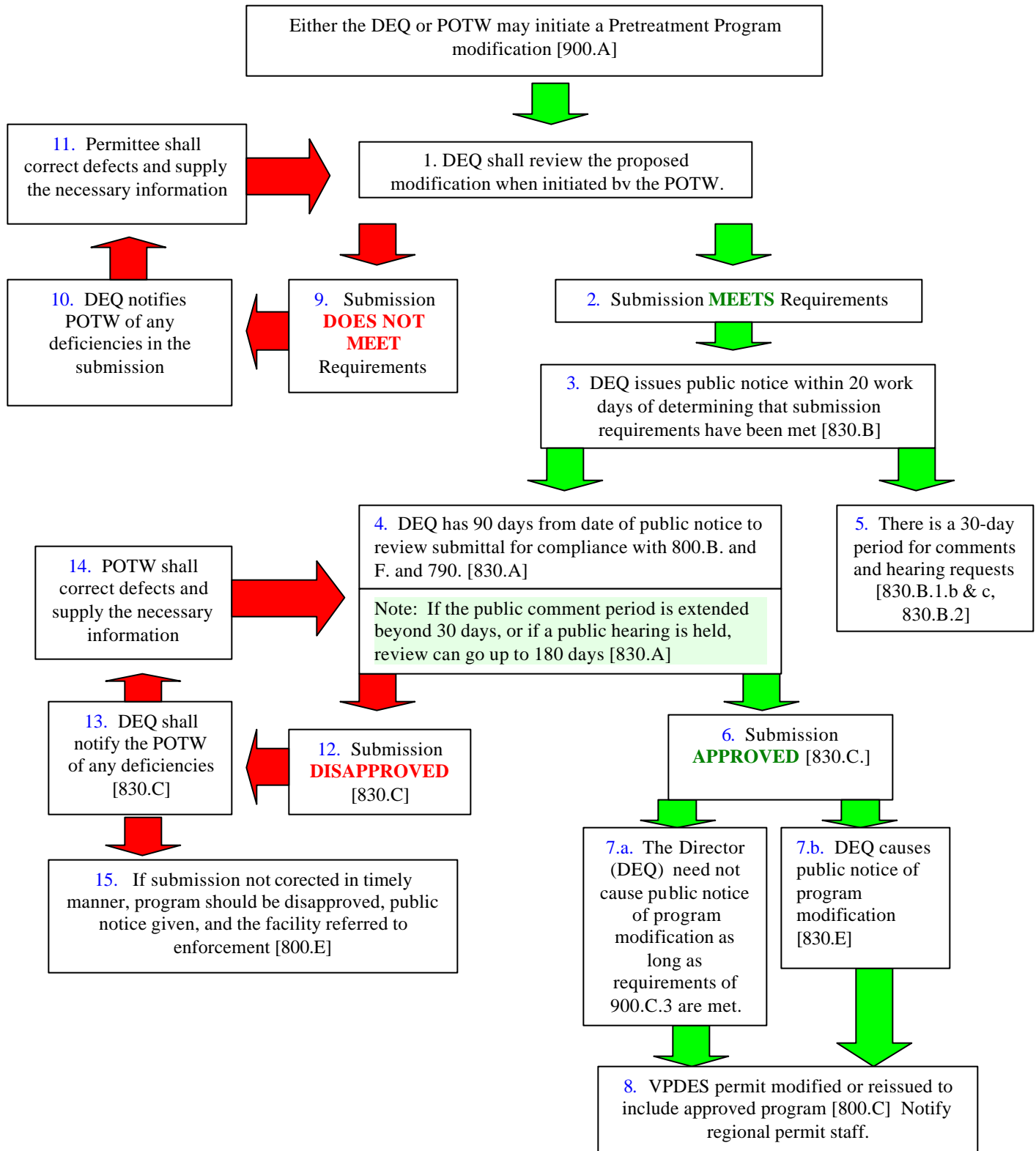
Note: If the public comment period is extended beyond 30 days, or if a public hearing is held, review can go up to 180 days (9 VAC 25-31-830.A.).

5. There is a 30-day period for comments and hearing requests (9 VAC 25-31-830.B.1.b & c., & 830.B.2.)
6. Submission [is](#) approved (9 VAC 25-31-830.C).

- 7.a. The Director (DEQ) need not cause public notice of program modification as long as the following conditions are met: 1) the original public notice states that the request will be approved if no comments are received within the specified comment period; 2) no substantive comments are received; and 3) the modification is approved without change (9 VAC 25-31-900.C.3).
- 7.b. If a second public notice is required, DEQ causes public notice of program modification approval 9 VAC 25-31-830.E.
8. VPDES permit modified or reissued to include the approved, modified program (9 VAC 25-31-830.C). This can be done as a minor permit modification (9 VAC 25-31-900.E, 9 VAC 25-31-400) as outlined in Section 6.0. Regional permit staff should be notified.
9. Submission does not meet requirements
10. DEQ shall notify the POTW that the submission has been disapproved and identify defects or omissions to be corrected and/or included for approval in accordance with applicable requirements. It is recommended that a time period of 30 days be given to the POTW in which to return the revised submission, however, additional time may be granted as necessary in accordance with 9 VAC 25-31-830.C. Upon receipt of revisions, return to Item 8. If the POTW fails to provide revisions within the specified time, they should be referred to enforcement.
11. The POTW shall correct the deficiencies and supply the necessary information for DEQ to evaluate. It is recommended that the POTW be given 30 days to respond to the deficiencies. More time may be given on a case by case basis. The review/approval process returns to Item 2 above.
12. If the Pretreatment Program submission is not acceptable, it is disapproved (9 VAC 25-31-830.C).
13. DEQ shall notify the POTW that the submission has been disapproved and identify defects or omissions to be corrected and/or included for approval in accordance with applicable requirements. It is recommended that a time period of 30 days be given to the POTW in which to return the revised submission, however, additional time may be granted as necessary in accordance with 9 VAC 25-31-830.C.
14. POTW shall correct defects and supply the necessary information. Upon receipt of revisions, return to Item 4.
15. If the POTW fails to provide revisions within the specified time, the Pretreatment Program should be formally disapproved and public noticed in accordance with 9 VAC 25-31-800.E.. The POTW should then be referred to DEQ enforcement.

6.2 APPROVAL PROCEDURES FOR SUBSTANTIAL PROGRAM MODIFICATIONS – FLOW DIAGRAM

(All regulatory citations are preceded by 9 VAC 25-31-...)



6.3 NON-SUBSTANTIAL PROGRAM MODIFICATIONS

Although Section 9 VAC 25-31-900.D of the Virginia Regulation does not specify exactly what constitutes a non-substantial program modification, they can generally be regarded as most actions which do not fall under the definition of substantial modifications in 9 VAC –25-31-900.B. The POTW shall notify DEQ of any non-substantial modification at least 45 days prior to implementation by the POTW (9 VAC 25-31-900.D.1). Non-substantial modifications usually require minimal review by the regional office.

By a memorandum dated July 21, 1997 ([Appendix H](#)), EPA outlined a number of program modifications that were originally considered as substantial but now are to be regarded as non-substantial. This is outlined further in the Federal Register dated July 17, 1997 (FR 38405-38415).

Examples of non-substantial modifications include:

1. Program modifications to clarify the program activities or to correct typographical errors in the documentation that significantly effect the content;
2. Updated information regarding the organizational structure of the POTW office responsible for implementing the program requirements;
3. General program procedures which will result in an increase of monitoring, reporting, or more stringent requirements for the IUs, this includes any change to a local limit;
4. The execution of any variance provision that the POTW believes to be solely within its discretion but outside the definition of a substantial program modification;
5. Modifications that only add to the legal authority, or modifications that only directly reflect a revision to the General Pretreatment Regulations, 40 CFR 403;
6. Modifications to the local pH limitation, and modifications to the industrial allocations which do not increase the Maximum Allowable Industrial Loadings for any pollutants;
7. Modifications to the POTW's method for implementing categorical standards;
8. Reductions in pretreatment resources; and
9. Modifications of the POTW's sludge disposal and management practices.

In addition, 9 VAC 25-31-800.F.6 allows the POTW to submit their initial SIU list and modifications to this list as non-substantial program modifications. Modifications to the initial SIU list shall be submitted with their annual report ([Appendix N](#)) and are not considered as program modifications.

The DEQ pretreatment coordinator should always evaluate the possible impact that any proposed change(s) may have on implementation of the approved program before making a determination on the type of modification. Decisions to characterize program changes as substantial can be supported by 9 VAC 25-31-900.

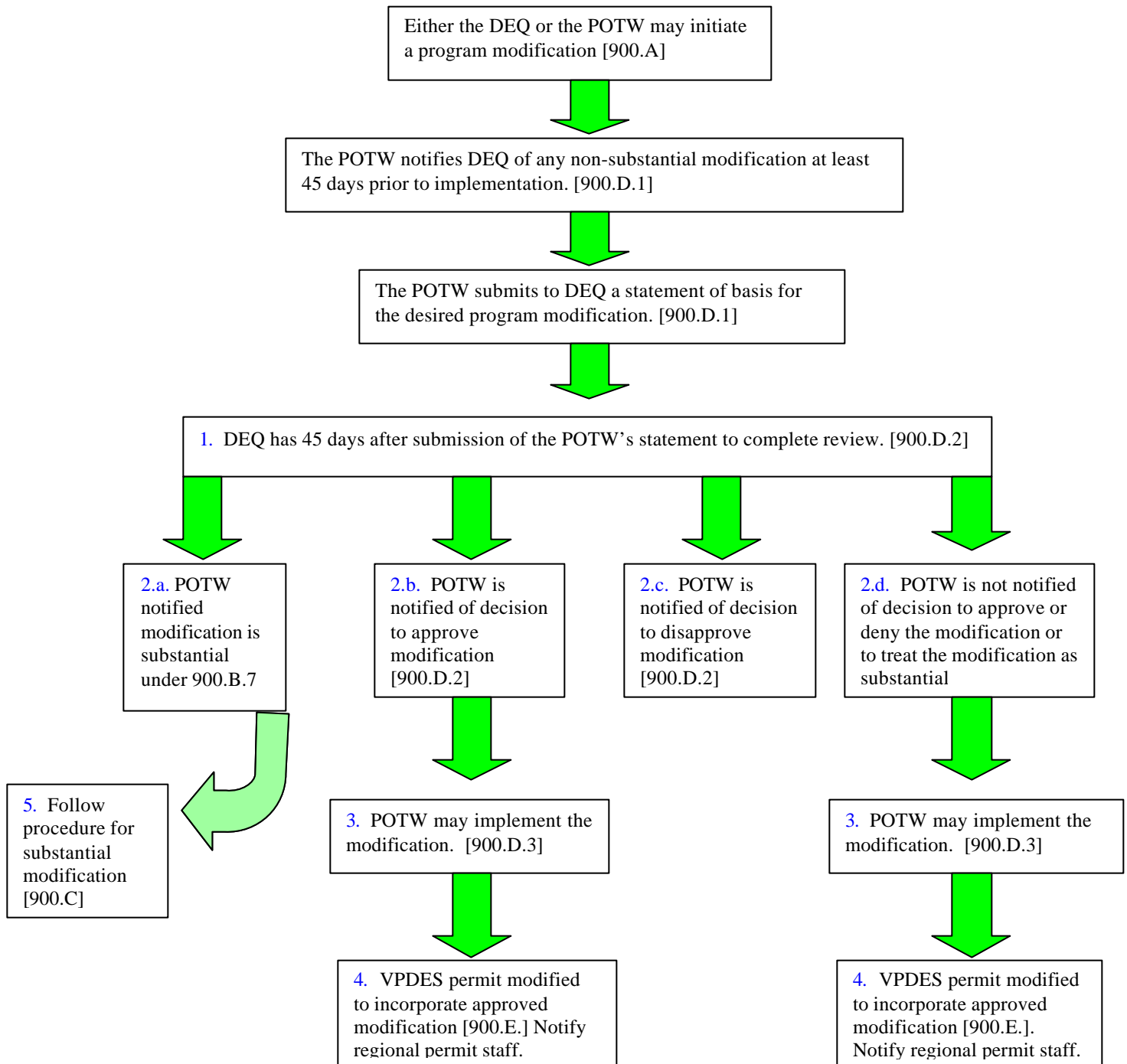
6.4 APPROVAL PROCEDURES FOR NON-SUBSTANTIAL MODIFICATIONS

1. DEQ has 45 days after submission of POTW's statement to notify POTW of decision (9 VAC 25-31-900.D.2).
- 2.a. If DEQ notifies the POTW that the submittal is considered a substantial modification rather than a non-substantial modification, then the approval procedures for substantial modifications are followed (9 VAC 25-31-900.D.3 and 900.C).
- 2.b. DEQ notifies the POTW of the decision to approve the modification (9 VAC 25-31-900.D.2).
- 2.c. DEQ notifies the POTW of the decision to disapprove the modifications (9 VAC 25-31-900.D.2).
- 2.d. DEQ does not notify the POTW of a decision to approve or deny the modification, or to treat modification, or to treat the modification as substantial under (9 VAC 25-31-900.B.7 and 9 VAC 25-31-900.D.3).
3. The POTW may implement the modification after DEQ notification of decision to approve (9 VAC 25-31-900.D.3).
4. If the Director does not notify the POTW within 45 days of his decision to approve or deny the modification, or to treat the modification as substantial under 9 VAC 25-31-900.B.7, the POTW may implement the modification (9 VAC 25-31-900.D.3).
5. All modifications shall be incorporated into the POTW's VPDES permit upon approval. The permit will be modified to incorporate the approved modification in accordance with minor modifications of permit at 9 VAC 25-31-400. Regional permit staff should be notified.

Note: Because the permit language for an approved program is not specific to a POTW, there is nothing to change or modify. Documentation of the POTW's modification request and DEQ's approval of the modification shall constitute compliance with 9 VAC 25-31-900.E.

6.4 APPROVAL PROCEDURES FOR NONSUBSTANTIAL PROGRAM MODIFICATION – FLOW DIAGRAM

(All regulatory citations are preceded by 9 VAC 25-31-...)



6.5 CHANGES NOT REQUIRING PROGRAM MODIFICATION

Some changes to a POTW's pretreatment program may not constitute either a substantial or non-substantial program modification subject to 9 VAC 25-31-900. The following list of activities will not be considered to fall into the program modification provisions at this time; however, DEQ shall still be notified:

1. Minor adjustments to regulatory procedures or organization which continues to be consistent with the program description and documentation of the approved program.
2. A change in a control mechanism issued to an IU of the POTW unless such change is not consistent with the requirements of the approved program.
3. An increase in the frequency of inspections or sampling of an IU unless such change in frequency is the direct result of a general program change considered to be a non-substantial modification.
4. Increases in program staffing levels or program resources.
5. Corrections of typographical errors in the documentation that do not significantly effect the content;
5. Title changes of pretreatment staff or departments

The pretreatment coordinator should always evaluate the possible impact that any proposed change(s) may have on implementation of the approved program before making a determination on the type of modification. Decisions to characterize program changes as modifications can be supported by 9 VAC 25-31-900.

7.0 VPDES PERMIT PRETREATMENT SPECIAL CONDITION LANGUAGE

7.1 POTWS WITH FLOWS $\geq 40,000$ GPD AND NO APPROVED/CONDITIONAL PROGRAM

1. Within 180 days of the effective or modification date of this permit, the permittee shall submit to the DEQ Regional Office a survey of all Industrial Users discharging to the POTW. The information shall be submitted on the DEQ Discharger Survey Form, or an equivalent form that includes the quantity and quality of the wastewater. Survey results shall include the identification of significant industrial users of the POTW.
2. If Categorical Industrial User(s) are identified, or if the permittee or DEQ determines that the industrial user(s) have potential to adversely affect the operation of the POTW or cause violation(s) of federal, state or local standards or requirements, the permittee shall develop and submit to the DEQ Regional Office, within one year of written notification by DEQ, a pretreatment program for approval. The program shall enable the permittee to control by permit the Significant Industrial Users* discharging wastewater to the treatment works.
3. Should evaluation by the DEQ of results of the Industrial User survey conducted in accordance with (1) above indicate that the permittee is not required to implement a pretreatment program, the requirements for program development described in (4) below may be suspended by the DEQ.
4. The approvable pretreatment program submission shall at a minimum contain the following parts:
 - a. Legal authority,
 - b. Program procedures,
 - c. Funding and resources,
 - d. Local limits evaluation, and local limits if needed,
 - e. Enforcement response plan, and
 - f. List of Significant Industrial Users .
5. Where the permittee is required to develop a pretreatment program, they shall submit to the DEQ Regional Office an annual report that describes the permittee's program activities over the previous year. The annual report shall be submitted no later than January 31 of each year and shall include:
 - a. An updated list of the Significant Industrial Users* showing the categorical standards and local limits applicable to each.
 - b. A summary of the compliance status of each Significant Industrial User with pretreatment standards and permit requirements.
 - c. A summary of the number and types of Significant Industrial User sampling and inspections performed by the POTW.
 - d. All information concerning any interference, upset, VPDES permit or Water Quality Standards violations directly attributable to Significant Industrial Users and enforcement actions taken to alleviate said events.

- e. A description of all enforcement actions taken against Significant Industrial Users over the previous 12 months.
 - f. A summary of any changes to the submitted pretreatment program that have not been previously reported to the DEQ Regional Office.
 - g. A summary of the permits issued to Significant Industrial Users since the last annual report.
 - h. POTW and self-monitoring results for Significant Industrial Users determined to be in significant non-compliance during the reporting period.
 - i. Results of the POTW's influent/effluent/sludge sampling, not previously submitted to DEQ.
 - j. Copies of newspaper publications of all Significant Industrial Users in significant non-compliance during the reporting period. This is due no later than March 31 of each year.
 - k. Signature of an authorized representative.
6. The DEQ may require the POTW to institute changes to the legal authority regarding Significant Industrial User permit(s):
- a. If the legal authority does not meet the requirements of the Clean Water Act, Water Control Law or State regulations;
 - b. If problems such as interferences, pass-through, violations of water quality standards or sludge contamination develop or continue; and
 - c. If federal, state or local requirements change.

*A significant industrial user is one that:

- 1. Has a process wastewater (**) flow of 25,000 gallons or more per average workday;
- 2. Contributes a process wastestream which makes up 5-percent or more of the average dry weather hydraulic or organic capacity of the POTW;
- 3. Is subject to the categorical pretreatment standards; or
- 4. Has significant impact, either singularly or in combination with other Significant Dischargers, on the treatment works or the quality of its effluent.

**Excludes sanitary, non-contact cooling water and boiler blowdown.

7.2 POTWS WITH APPROVED/CONDITIONAL PROGRAMS

- A. The permittee's pretreatment program has been approved. The program is an enforceable part of this permit. The permittee shall:
1. Implement a pretreatment program that complies with the Clean Water Act, Water Control Law, State regulations and the approved program.
 2. Submit to the DEQ Regional Office an annual report that describes the permittee's program activities over the previous year. The annual report shall be submitted no later than January 31 of each year and shall include:
 - a. An updated list of the Significant Industrial Users* showing the categorical standards and local limits applicable to each.
 - b. A summary of the compliance status of each Significant Industrial User with pretreatment standards and permit requirements.
 - c. A summary of the number and types of Significant Industrial User sampling and inspections performed by the POTW.
 - d. All information concerning any interference, upset, VPDES permit or Water Quality Standards violations directly attributable to Significant Industrial Users and enforcement actions taken to alleviate said events.
 - e. A description of all enforcement actions taken against Significant Industrial Users over the previous 12 months.
 - f. A summary of any changes to the submitted pretreatment program that have not been previously reported to the DEQ Regional Office.
 - g. A summary of the permits issued to Significant Industrial Users since the last annual report.
 - h. POTW and self-monitoring results for Significant Industrial Users determined to be in significant non-compliance during the reporting period.
 - i. Results of the POTW's influent/effluent/sludge sampling, not previously submitted to DEQ.
 - j. Copies of newspaper publications of all Significant Industrial Users in significant non-compliance during the reporting period. This is due no later than March 31 of each year.
 - k. Signature of an authorized representative.

3. Within 180 days of the effective or modification date of this permit, submit to the DEQ Regional Office a survey of all Industrial Users discharging to the POTW. The information shall be submitted to the POTW on the DEQ's Discharger Survey Form or an equivalent form that includes the quantity and quality of the wastewater. Survey results shall include the identification of significant industrial users of the POTW.
4. Submit any changes to the approved pretreatment program to the DEQ Regional Office and obtain approval before implementation of the changes.
5. Ensure all Significant Industrial Users' permits are issued and reissued in a timely manner and that the Significant Industrial User permits issued by the POTW are effective and enforceable.
6. Inspect and sample all Significant Industrial Users at a minimum of once a year.
 - a. Sampling shall include all regulated parameters, and shall be representative of the wastewater discharged.
 - b. Inspection of the Significant Industrial Users shall cover all areas which could result in wastewater discharge to the treatment works including manufacturing, chemical storage, pretreatment facilities, spill prevention and control procedures, hazardous waste generation and Significant Industrial User's self-monitoring and records.
7. Implement the reporting requirements of Part VII of the VPDES Permit Regulation.
8. Review the Enforcement Response Plan (ERP) and ensure it meets state and federal regulatory requirements. The approved ERP is an enforceable part of this permit and shall be implemented.
9. Develop local limits or reevaluate local limits using current influent, effluent and sludge monitoring data and submit the data and results of the evaluation to the DEQ Regional Office within one year of the effective or modification date. All Significant Industrial Users shall be sampled at the end of any categorical process and at the entrance to the treatment works.
10. Ensure that adequate resources are available to implement the approved program.
11. Meet all public participation requirements and annually public notice Significant Industrial Users in significant non-compliance with pretreatment standards and requirements for the previous 12 months.
12. In lieu of the survey, the permittee may elect to develop, submit for approval and implement the plan to continuously survey the industrial community in their jurisdiction.

B. The DEQ may require the POTW to institute changes to its pretreatment program:

1. If the approved program is not implemented in a way satisfying the requirements of the Clean Water Act, Water Control Law or State regulations;
2. If problems such as pass-through, interference, water quality standards violations or sludge contamination develop or continue; and
3. If federal, state or local requirements change.

*A significant industrial user is one that:

1. Has a process wastewater (**) flow of 25,000 gallons or more per average workday;
2. Contributes a process wastestream which makes up 5-percent or more of the average dry weather hydraulic or organic capacity of the POTW;
3. Is subject to the categorical pretreatment standards; or
4. Has significant impact, either singularly or in combination with other Significant Dischargers, on the treatment works or the quality of its effluent.

**Excludes sanitary, non-contact cooling water and boiler blowdown.

7.3 POTWS WITH APPROVED PRETREATMENT PROGRAMS AND NO IDENTIFIED SIUS

A. The permittee's pretreatment program has been approved. The program is an enforceable part of this permit. The permittee shall:

1. Within 180 days of the effective or modification date of this permit, submit to the DEQ Regional Office a survey of all Industrial Users discharging to the POTW. The information shall be submitted to the POTW on the DEQ's Discharger Survey Form or an equivalent form that includes the quantity and quality of the wastewater. Survey results shall include the identification of significant industrial users of the POTW.

In lieu of the survey, the permittee may elect to develop, submit for approval and implement the plan to continuously survey the industrial community in their jurisdiction.

B. Upon determination of receiving process wastewater from a Significant Industrial User* to this treatment works, the permittee shall:

1. Notify the DEQ, in writing within five (5) days;
2. Implement the approved pretreatment program that complies with the Clean Water Act, Water Control Law and State regulations;

3. Submit to the DEQ Regional Office, an annual report that describes the permittee's program activities over the previous year. The annual report shall be submitted no later than January 31 of each year and shall include:
 - a. An updated list of the Significant Industrial Users* showing the categorical standards and local limits applicable to each.
 - b. A summary of the compliance status of each Significant Industrial User with pretreatment standards and permit requirements.
 - c. A summary of the number and types of Significant Industrial User sampling and inspections performed by the POTW.
 - d. All information concerning any interference, upset, VPDES permit or Water Quality Standards violations directly attributable to Significant Industrial Users and enforcement actions taken to alleviate said events.
 - e. A description of all enforcement actions taken against Significant Industrial Users over the previous 12 months.
 - f. A summary of any changes to the submitted pretreatment program that have not been previously reported to the DEQ Regional Office.
 - g. A summary of the permits issued to Significant Industrial Users since the last annual report.
 - h. POTW and self-monitoring results for Significant Industrial Users determined to be in significant non-compliance during the reporting period.
 - i. Results of the POTW's influent/effluent/sludge sampling, not previously submitted to DEQ.
 - j. Copies of newspaper publications of all Significant Industrial Users in significant non-compliance during the reporting period. This is due no later than March 31 of each year.
 - k. Signature of an authorized representative.
4. Submit any changes to the approved pretreatment program to the DEQ Regional Office and obtain approval before implementation of the changes.
5. Ensure all Significant Industrial User's permits are issued and reissued in a timely manner and that the Significant Industrial User permits issued or reissued by the POTW are effective and enforceable.
6. Inspect and sample all Significant Industrial Users at a minimum of once a year.
 - a. Sampling shall include all regulated parameters, and shall be representative of the wastewater discharged.
 - b. Inspection of the Significant Industrial Users shall cover all areas which could result in wastewater discharge to the treatment works including manufacturing, chemical storage, pretreatment facilities, spill prevention

and control procedures, hazardous waste generation and Significant Industrial User's self-monitoring and records.

7. Implement the reporting requirements of Part VII of the VPDES Permit Regulation.
8. Review the Enforcement Response Plan (ERP) and ensure it meets state and federal regulatory requirements. The approved ERP is an enforceable part of this permit and shall be implemented.
9. Develop local limits or reevaluate local limits using current influent, effluent and sludge monitoring data and submit the data and results of the evaluation to the DEQ Regional Office within one year of the effective or modification date. All Significant Industrial Users shall be sampled at the end of any categorical process and at the entrance to the treatment works.
10. Ensure that adequate resources are available to implement the approved program.
11. Meet all public participation requirements and annually public notice Significant Industrial Users in significant non-compliance with pretreatment standards and requirements for the previous 12 months.

C. The DEQ may require the POTW to institute changes to its pretreatment program:

1. If the approved program is not implemented in a way satisfying the requirements of the Clean Water Act, Water Control Law or State regulations;
2. If problems such as pass-through, interference, water quality standards violations or sludge contamination develop or continue; and
3. If federal, state or local requirements change.

*A significant industrial user is one that:

1. Has a process wastewater (**) flow of 25,000 gallons or more per average workday;
2. Contributes a process wastestream which makes up 5-percent or more of the average dry weather hydraulic or organic capacity of the POTW;
3. Is subject to the categorical pretreatment standards; or
4. Has significant impact, either singularly or in combination with other Significant Dischargers, on the treatment works or the quality of its effluent.

**Excludes sanitary, non-contact cooling water and boiler blowdown.

8.0 PRETREATMENT PROGRAM MANAGEMENT – CONTROL AUTHORITY

Upon receiving approval of a pretreatment program, the POTW will be responsible for implementing the approved program. The following is a list that outlines the POTW's responsibilities in more detail than that of Section 4 of this manual. Many of these items are already mentioned elsewhere in this manual but this section elaborates more on how they are to be implemented in a day to day manner.

8.1 SIGNIFICANT INDUSTRIAL USER IDENTIFICATION

- A. Industrial Waste Survey (IWS) In general, all POTWs with flows equal to or over 40,000 GPD should conduct an IWS at least once every 5 years in order to identify potential SIUs. The requirement should be included as a Special Condition of the VPDES permit during each permit issuance and each subsequent reissuance. Details on how to conduct an IWS can be found in [Appendix K](#) and in EPA's 1983 Guidance Manual for POTW Pretreatment Program Development.

DEQ has developed a short screening form as well as a long form which can be used by the POTW in conducting the survey, or the POTW can develop equivalent forms (See Appendix K). A screening form may be used to distinguish between users who do not need to complete the long form and those who do, and because of its simplicity, often will generate a better response. In any event, the POTW must evaluate all survey responses to determine the following:

1. the nature, quantity and quality of the effluent of industrial/commercial dischargers;
2. whether or not the wastes received are subject to National Pretreatment Standards; and
3. whether or not current dischargers have the potential to interfere with the treatment processes or limit the selection of cost effective, environmentally sound wastewater treatment and sludge disposal.

Once complete, the POTW must develop a master list of users, summarize the survey findings, and submit the IWS to the Regional Office. Facilities with an approved program may submit only the results of the survey effort as long as completed survey forms are retained in their files.

- B. Ongoing Survey In addition to the IWS, it is recommended that POTWs keep their industrial databases up-to-date, and all approved programs must have procedures for doing this. An ongoing survey is one way to accomplish this and may employ the following sources of information:

- 1) Existing sewer authority files
- 2) Business Licenses
- 3) Building Permits
- 4) Internet
- 5) City and State industrial directories
- 6) Labor Department records
- 7) Property tax records
- 8) Chamber of Commerce rosters
- 9) Census Bureau records
- 10) Local telephone directories

- 11) Water consumption records
- 12) Dun's Market Identifiers - Dun & Bradstreet
- 13) Drive By Inspections
- 14) Municipal permit application form.

Often, POTWs will use information from these sources to identify who should be sent IWS forms. POTWs that successfully conduct ongoing surveys and demonstrate a commitment to SIU identification may be given relief from conducting the formal 5-year survey. This can be less demanding on the POTW and can provide the DEQ pretreatment coordinator more flexibility in reviewing the IWS. Boilerplate language for this option is included in the VPDES permit implementation language.

As soon as possible, but within 30 days of the designation of an industrial user as significant, the POTW shall notify the industrial user of applicable pretreatment standards and requirements. Additionally, the POTW must notify DEQ of any changes to their SIU list in their annual report.

- C. Hospitals Questions have arisen over the proper classification of hospitals by POTWs. Differing and equally valid interpretations exist as to what constitutes process flow for these facilities. Discharged pollutant concentrations can vary widely. For these reasons, classification of hospitals as significant industrial users can be left to the discretion of the POTWs. However, hospitals must be retained as regulated users if they were considered as such in local limits development.

8.2 SIGNIFICANT INDUSTRIAL USER PERMITS

The POTW shall issue to all significant industrial users, permits which contain, at a minimum the following:

1. A statement of duration of no longer than five years and a statement of non-transferability without prior approval by the permittee;
2. Applicable effluent limits based on pretreatment standards;
3. Applicable self-monitoring, sampling, reporting, notification, and record keeping requirements, including an identification of pollutants to be monitored, sampling location, sampling frequency, and sample type;
4. A statement of applicable civil and or criminal penalties; and
5. Applicable compliance schedules.

Ultimately it is the POTWs role to issue their industrial user permits but they may want to solicit the advice of the DEQ pretreatment coordinator prior to issuance. The DEQ pretreatment coordinator's ability to provide assistance will be dependent on regional demands and other obligations.

8.3 INTERJURISDICTIONAL AGREEMENTS

Although approved pretreatment programs contain all the legal authority necessary to implement the program, jurisdictional situations often change after program approval. These changes may be due to either new connections from adjacent service areas or the location of new SIUs within adjacent service areas (where there used to be none). In general, the POTW must establish an interjurisdictional

agreement with each outlying jurisdiction(s) which has SIUs contributing wastewater to the POTW. These agreements must address the duty of each contributing jurisdiction to develop and adopt a legal authority at least as stringent as that of the permittee. These agreements must also address the jurisdiction's participation and responsibility in implementing procedural requirements of the pretreatment program including: industrial user inventory; permit issuance; and compliance monitoring, reporting and enforcement. The receiving POTW must maintain all records of industrial users discharging to the POTW and the records must be available at DEQ audits of the POTW. For more information regarding IJAs, EPA's Guidance Manual for Multijurisdictional Programs (June, 1994) should be referenced.

8.4 LOCAL LIMITS

Local limits are intended to control dischargers of pollutants by industrial users that might cause interference or pass through. Local limits are developed using site specific criteria and are considered pretreatment standards under Federal, State, and local law.

The POTW must evaluate the need for local limits and periodically revisit or reevaluate that need. Any time SIUs come into or leave a service area, flows change substantially, or treatment is modified, the limits should be reviewed for accuracy. At a minimum, the permit implementation language requires that this be done once per permit cycle (every 5 years) and it is required within one year of the permit (re)issuance date. The permittee shall follow all public notice requirements. [Appendix L](#) should be referenced for a description of the local limits development process. Additionally, EPA's Guidance Manual on the Development and Implementation of Local Discharge Limitations Under the Pretreatment Program (Dec, 1987) may serve as a useful reference.

8.5 INSPECTIONS AND SAMPLING

The POTW shall inspect the industrial users and sample and analyze the industrial users effluent commensurate with the character, volume and consistency of the contribution. The frequency of sampling shall be adequate to determine the compliance status of the SIU exclusive of the self-monitoring data submitted by that user. By regulation 9 VAC 25-31-800.F.2.e, the sampling and inspection of the SIU(s) shall be conducted once a year at a minimum.

The inspection format found in Appendix M can serve as a guide. In general, the same items that are covered by DEQ pretreatment coordinators during their inspections should also be covered by the control authority inspector. At a minimum, this should include a thorough inspection/review of the following:

1. Production Area(s)
2. Pretreatment Area
3. Raw Material and Chemical Storage Area
4. Hazardous Waste Storage Area
5. Discharge Point
6. Sampling Point
7. Records Pertaining to the Permit

The POTW shall investigate all instances of non-compliance and perform inspections and sampling accordingly.

It is recommended that the POTW sample minimally for all of the industrial user's permitted pretreatment standards. It should be noted that section 9 VAC 25-31-840.G & H. of the regulation states that SIUs may use the control authority's sample event to count for their required sampling.

Sample collection and analysis and gathering of compliance data shall be performed with sufficient care to produce evidence admissible in judicial enforcement proceedings.

8.6 SIU REPORTS AND REPORT REVIEW

The POTW shall review compliance information generated by SIUs in accordance with the ERP, and identify violations of the SIU permit and Sewer Use Ordinance. In addition, they shall review the following reports required of categorical SIUs (Section 403.12 of the General Pretreatment Regulations and Section 9 VAC 25-31-840 of the Permit Regulation):

1. Baseline Monitoring Report (BMR) - submitted within 180 days of the effective date of a categorical standard.
2. Compliance Schedule Progress Report - submitted within 14 days following each milestone of a compliance schedule as contained in a BMR.
3. 90-Day Compliance Report - submitted within 90 days following the date of final compliance with the categorical standard.
4. Periodic Compliance Reports - submitted semi-annually during the months of June and December.

8.7 ENFORCEMENT

One of the most significant requirements of pretreatment program implementation is municipal enforcement against industrial users that are in non-compliance. The success of the program requires vigorous enforcement efforts by State and local pretreatment authorities.

POTW enforcement should be based on an approved ERP. Content and format for such a plan are discussed in EPA's September 1989, Guidance for Developing Control Authority ERPs. The respective regulatory citations are 40 CFR Part 403.8(f)(5) and 9 VAC 25-31-800.F.5. Pertinent information can also be found in the DEQ Guidance Manual for POTWs (Nov 9, 1995).

The ERP delineates the POTW's enforcement procedures, indicating how it will investigate and respond to instances of non-compliance. The plan must describe the types of escalating enforcement responses to all anticipated types of industrial user violations and the time period within which responses will take place. In general, all violations should be documented with the issuance of a Notice of Violation. An exception might involve such things as self monitoring reports which are a few days late in which case a simple phone call to the industrial user might be appropriate. The minimum response to effluent violations which constitute significant non-compliance would be the issuance of an Enforcement Order with a compliance schedule. Violations of a compliance schedule should be met with an escalated response. All compliance schedules should be submitted to the respective DEQ regional pretreatment coordinator for review prior to issuance. Finally, the ERP must identify by title personnel responsible for each type of response.

8.8 ANNUAL PUBLICATION OF SNC FACILITIES

POTWs with a pretreatment program are required to annually publish, in the largest newspaper within the POTW's service area, a list of significant industrial users which, during the previous 12 months, were in significant non-compliance with applicable pretreatment standards and requirements. The POTW must also use the SNC criteria as a basis for reporting a significant industrial user's compliance status to the DEQ in its pretreatment report.

There are eight SNC criteria set forth in 9 VAC 25-31-800.2.g. Two of these criteria concern violations evaluated over a six month time frame. The DEQ will evaluate these criteria on a rolling quarterly basis. The POTW must determine SNC for their universe of industrial users on a rolling quarterly basis using fixed quarters corresponding to the yearly quarters, (March 31; June 30; September 30; and December 31). [Appendix R](#) describes this process. At the end of the quarter, POTWs are to evaluate their industrial user's compliance status using the two criteria of SNC definition, which are evaluated on a six month time frame. Under this system, each industrial user is evaluated for SNC four times during the year, and the total evaluation period covers 15 months. When the POTW is required to publish, it must list in the newspaper all the industrial users which have been identified as SNC during the previous year. If a facility has been determined to be in SNC based solely on violations which occurred in the first quarter of the 15 month period and the facility has demonstrated consistent compliance in the subsequent four quarters, then the POTW is not required to republish the IU in the newspaper provided that the IU was published in the previous year for the same violation.

As per 9 VAC 25-31-800.F.2.g, a significant industrial user is in **significant noncompliance** if its violation meets one or more of the following criteria:

1. Chronic violations of wastewater discharge limits, defined here as those in which sixty-six percent or more of all of the measurements taken during a six-month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter;
2. Technical Review Criteria (TRC) violations, defined here as those in which thirty-three percent or more of all of the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC = 1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH);
3. Any other violation of a pretreatment effluent limit (daily maximum or longer-term average) that the Control Authority determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public);
4. Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the POTW's exercise of its emergency authority established under 9 VAC 25-31-800 F.1.f. to halt or prevent such a discharge;
5. Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance;
6. Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;

7. Failure to accurately report noncompliance; or
8. Any other violation or group of violations that the Control Authority determines will adversely affect the operation or implementation of the local pretreatment program.

8.9 RECORD KEEPING

The POTW shall develop and maintain a data management system which includes industrial user inventory, characterization of discharge, compliance status, permit status, inspection records, sampling records, and enforcement actions.

The POTW shall retain for a minimum of three years, all records of monitoring activities and results and shall make such records available to the DEQ upon request. Records shall include:

1. The date, exact place, method and time of sampling and the name of the person taking the sample;
2. The date the analysis was performed;
3. Who performed the analysis;
4. The analytical technique/method used; and
5. The results of such analysis.

8.10 HAZARDOUS WASTE NOTIFICATION

The POTW shall notify its industrial users of their obligation to comply with applicable requirements under Subtitle C and D of the Resources Conservation and Recovery Act (RCRA).

The distinction between hazardous waste and toxic pollutants is important to clarify. RCRA regulates specific waste types as hazardous waste if they either exhibit certain characteristics or are listed in the regulation. RCRA also imposes controls to ensure that designated wastes are subject to rigorous tracking and management practices. Included in the RCRA regulated community are hazardous waste generators, transporters and treatment, storage and disposal facilities.

By contrast, the National Pretreatment Program, established under the Clean Water Act, has a different focus. It requires POTWs or states to control toxic pollutants discharged into sewerage systems that may interfere with, pass through, or otherwise upset the POTW's treatment processes. The toxic pollutants are identified in the Clean Water Act (Sections 301 and 307).

In some instances, the same pollutants are considered both toxic and hazardous under the National Pretreatment Program and RCRA, respectively. To alleviate any confusion, the term "hazardous" is for wastes that are transported, treated or stored and "toxic" for those wastes discharged into POTWs and regulated under the National Pretreatment Program.

The first overlap between RCRA and pretreatment is that significant dischargers regulated under the pretreatment program may also be hazardous wastes generators under RCRA. In fact many significant dischargers generate hazardous wastes in the course of pretreating wastewaters (electroplating wastewater treatment sludges are listed as hazardous wastes). Recognizing this fact, EPA directs

POTWs to assist significant dischargers with RCRA compliance by notifying them of applicable requirements.

Second, under RCRA's Domestic Sewage Exemption, any waste generator or industry may discharge what would otherwise be considered hazardous waste into the sewer if the discharges are mixed with domestic sewage. It is possible therefore, that POTWs may see an increase of hazardous wastes discharged into the sewer system as more waste generators take advantage of this exemption. Thus, RCRA defers to the Clean Water Act and pretreatment program regulations to make sure that wastes released to the POTWs under the Domestic Sewage Exemption are managed properly. The overlap caused by this exemption places a special regulatory challenge on POTWs with pretreatment programs.

The Domestic Sewage Regulations require industrial users to give written notification to the POTW, State Waste Management Director and EPA of discharges of hazardous waste above 100kg/calendar month. The Regulations set forth the specifics of the notification and the conditions under which the notification is to be made. They are as follows:

1. If the SIU discharges a hazardous waste over 100 kg/month, then they must do the full report with substance, ID#, type discharge, estimation of mass and concentration in the past month and estimate for the coming year;
2. If the SIU discharges any acute hazardous waste, they must do the full report as above;
3. If the SIU discharges a non-acute hazardous waste in the range of 15 – 100 kg/month, then they must report the substance, ID#, and type discharge; and
4. If the SIU discharges a non-acute hazardous waste of less than 15 kg/month, then they are may report they are not discharging hazardous waste.

A third key overlap affecting municipalities is that POTWs themselves may be regulated parties subject to RCRA requirements. A POTW that generates a sludge that either fails the extraction procedure toxicity test or exhibits the characteristics of ignitability, corrosivity, or reactivity is considered a hazardous waste generator and must comply with RCRA regulations. These three overlaps between RCRA and pretreatment can affect directly how a municipality regulates the discharge of toxic pollutants.

It is the responsibility of the POTW to notify their significant dischargers of compliance provisions under RCRA to ensure that those dischargers are informed of their hazardous waste management obligations.

8.11 ANNUAL REPORTING TO DEQ

The permittee shall submit a report annually to the DEQ describing the permittee's pretreatment activities over the past 12 months. In the event that the permittee is not in compliance with any condition or requirement of his permit, the permittee shall also include the reasons for non-compliance and state how and when the permittee shall comply with such conditions and requirements. This annual report is due on January 31 of each year and shall contain, but not be limited to, the information listed in [Appendix N](#).

9.0 PRETREATMENT PROGRAM MANAGEMENT – BY DEQ

DEQ's primary responsibility is to determine on an ongoing basis whether the POTW's approved programs are being adequately implemented and whether the approved programs are effective and consistent with the current regulatory requirements.

The oversight mechanisms are: audits of the POTWs, with the completion of the checklist and follow-up deficiency letters; IU inspections, with the completion of the checklist and follow-up deficiency letters; and regional review of annual reports provided by the POTWs.

9.1 DEQ AS THE CONTROL AUTHORITY

In situations where a POTW has industrial users but no pretreatment program or developing program, DEQ must implement Virginia's pretreatment program that was approved by EPA as part of the delegation process in 1989. This makes DEQ the control authority in addition to the approval authority, responsible for ensuring that all significant industrial users within the POTWS service area are in compliance with applicable categorical standards and general pretreatment standards. As such, DEQ may be responsible for the following:

1. Determining the applicability of categorical pretreatment standards;
2. Determining-the need for local limits to be developed to protect the POTW and developing such limits;
3. Receiving and reviewing self-monitoring reports;
4. Issuing permits to significant industrial users; and
5. Conducting sampling and inspections.

When necessary, the regional offices will perform these activities with support from the Central Office. In lieu of undertaking these responsibilities, the pretreatment coordinator may require the development of a pretreatment program with the explanation that conditional approval may be granted upon request.

9.2 INSPECTIONS

The Memorandum of Agreement (MOA) with EPA dictates that DEQ conduct inspections of SIUs ([Appendix C](#)). The primary purpose of these inspections is to independently verify the compliance status of the SIU with pretreatment standards and POTW requirements. Additional objectives of the inspection may include: 1) evaluating POTW inspection and/or sampling procedures and methods. 2) promoting pollution prevention techniques at the site; 3) identifying potential opportunities for future P2 efforts; 4) promoting Environmental Management Systems (EMS); 5) educating the SIU about other environmental issues and regulations concerning the site (air, waste, water); and 6) identifying potential issues or questions for other DEQ divisions to address. Section 9.12 contains more details regarding P2 initiatives.

Only those industrial users that are categorical or that meet the definition of a significant industrial user and have 25,000 GPD or greater process wastewater discharge (or 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW) need to be inspected. All the industrial users the POTW has permitted may not meet the definition of a significant industrial user. The flow criterion should be based on total industrial flow (minus sanitary) from the outset. The scope could then be narrowed to 25,000 GPD of process wastewater when details on the flow rate and composition of any non-contact cooling or boiler blowdown streams are obtained. Such streams need to be included if they contain significant concentration of pollutants. Sanitary flows can be estimated on the basis of the

number of employees when such information is available. The Virginia Sewerage Regulations list a range from 15 to 35 GPD per person per eight hour shift. Hospitals classified by POTWs as significant, and with flows of 25,000 GPD or more, are to be inspected.

Many POTW pretreatment coordinators have completed the Pretreatment Facility Inspection self study course offered by the University of California at Sacramento. Information from this program is also useful to DEQ staff conducting industrial user inspections.

It is DEQ's practice that the frequency for inspection of categorical users shall be every other year and the frequency for SIUs (> 25,000 gpd) shall be once every 5 years. For conditional programs (non-approved pretreatment municipalities), the CIUs shall be inspected annually. A sample five year schedule is included in [Appendix P](#) which may be helpful in planning an inspection schedule to even out the work load.

A report should be completed after every inspection using the form and instructions in [Appendix M](#). The completed report shall be placed in the SIU's file. A copy of the report shall be sent to the IU and the POTW if deficiencies or violations are noted. The POTW is responsible for ensuring the SIU addresses the issue(s) in a timely manner. Should the POTW not agree with the reported findings of DEQ, both parties should negotiate a resolution. If no deficiencies are identified, a copy of the report only needs to be sent upon request of the SIU and/or POTW. At a minimum, a letter acknowledging the inspection shall be sent to the SIU.

Note: If the regional pretreatment coordinator deems that the POTW inspection report is sufficient, a copy of that report may be placed in the DEQ file in lieu of completing an independent one.

Inspections are normally announced. It may be beneficial to coordinate the inspection with the POTW to lessen the burden on the IU. If the inspection is conducted jointly with the POTW, the POTW should take the lead in scheduling and conducting the inspection. This will allow the Pretreatment Coordinator to evaluate the POTW's inspection procedures and processes.

The following are different inspection techniques that may be used when coordinating and conducting inspections, as well as advantages and disadvantages associated with each:

1. Announced to POTW and SIU – Advantages: Is less disruptive to SIU; provides for better communication and relations between SIU, DEQ and POTW; provides additional regulatory presence; decreases likelihood of discrepancies between DEQ and POTW inspections; and ensures availability of staff and records at SIU. Disadvantages: Difficulty in scheduling of inspection and less likelihood of finding hidden deficiencies or violations.
2. Announced to POTW, Unannounced to SIU – Advantages: provides additional regulatory presence; increases likelihood of finding hidden deficiencies or violations; and decreases likelihood of discrepancies between DEQ and POTW inspections. Disadvantages: Less likely to have staff and records readily available at SIU.
3. Announced to SIU, Unannounced to POTW- Advantages: Makes for easier scheduling; provides opportunity for SIU to comment on POTW; less threatening to SIU. Disadvantages: POTW does not observe SIU deficiencies first hand and SIU may be confused as to whether they answer to DEQ or the POTW.
4. Unannounced to POTW and SIU - Advantages: increases likelihood of finding hidden deficiencies or violations; Disadvantages: POTW does not observe SIU deficiencies first hand and the SIU is less likely to have staff and records readily available.

Key Components of Inspection

At a minimum, the inspection should include a thorough inspection/review of the following:

- Production Area(s)
- Pretreatment Area
- Raw Material and Chemical Storage Area
- Hazardous Waste Storage Area
- Discharge Point
- Sampling Point
- Records Pertaining to the Permit

9.3 AUDITS

DEQ has commitments with EPA Region III to perform annual POTW pretreatment program audits. The DEQ Central Office will continue to negotiate these commitments with EPA Region III and notify the DEQ Regional Offices of the actual number of audits to be performed. Generally, audits will be conducted at POTWs with full, approved programs every year. The audit represents an evaluation of POTW pretreatment program activities. The audit is comprehensive, covering all aspects of the POTW's program. The audit will require follow-up time for report preparation. The audit follow-up letter should be sent within 30 days of the completion of the audit. The time for the POTW to correct the deficiencies pointed out in the letter should be 30 days unless it is a change in the Legal Authority in which case 60 days should be given.

[Appendix Q](#) should be used as the Regional Office audit checklist. The Regional Office should submit to the Central Office a copy of the transmittal letter and audit. The Regions should also complete the audit summary in CEDS after each audit is completed. Detailed procedures for conducting audits can be found in EPA's "Pretreatment Compliance Inspection and Audit Manual for Approval Authorities" (July, 1986). Regional Offices should submit to the Central Office a quarterly list of audits scheduled and conducted for each quarter and outlined in [Appendix S](#).

Audits are designed to provide a comprehensive review of a POTW's approved program. The audit provides the Regional Offices the opportunity to evaluate the following components of the POTW approved programs.

The procedures outlined in the POTW's approved program submission and the extent to which those procedures have been followed during implementation of the program;

The legal adequacy of local ordinances, ERPs, interjurisdictional agreements, and significant discharger permits relied upon by a POTW for the authority to carry out program responsibilities;

The adequacy of a POTW's compliance monitoring activities including the inspection of significant dischargers' facilities, the sampling and analysis of significant discharges, and the receipt and review of significant discharger self-monitoring reports;

The adequacy of a POTW's data management or record maintenance systems to track the compliance status of its users and to maintain records of data and reports submitted by industries; and

The adequacy of resources (i.e. personnel, equipment, and funding) available for implementation of the POTW's pretreatment program.

In situations where a control authority has multiple POTWs under its approved pretreatment program, pretreatment activities for each POTW must be evaluated.

9.4 ANNUAL REPORT REVIEW

All POTWs with approved pretreatment programs are required to submit annual reports by January 31 of each year. The Regional Offices will be responsible for reviewing these annual reports, recommending follow-up corrections to deficiencies, and summarizing the report to Central Office (as outlined in Section 9.6).

9.5 FILE MANAGEMENT

Each regional office should maintain complete and well organized files on each POTW required to implement an approved pretreatment program. It is recommended that one main file be made which includes all parts of the currently approved program. As different parts of the program are updated and improved, they should be inserted into this file. This enables the pretreatment coordinators as well as any other interested parties to quickly and accurately determine the contents of the approved program.

Additionally, files should be maintained for each significant industrial user within each program. At a minimum, the files should contain copies of the SIU permits and inspections conducted by DEQ. Other relevant information can be included in these files as necessary.

9.6 REPORTS

Regional Pretreatment Coordinators are responsible for submitting the following reports to the Central Office:

A. Quarterly Reports Summary - These reports should be submitted to the Central Office within 10 days following the end of every Federal quarter (October – December, January – March, April – June, July – September) and should contain the following information :

1. Audits scheduled and completed
2. Progress report and schedule of completion for developing programs
3. List of known industrial users discharging to non-pretreatment POTWs and projected inspection dates.
4. Compliance status of the CIUs in non-pretreatment cities
5. SIU inspections scheduled and completed
6. POTW annual reports reviewed

A blank report form is included as [Appendix S](#)

B. Annual Report Summary – An annual report for each region is to be submitted to the Central Office which contains copies of all the POTW pretreatment performance summaries ([Appendix N](#)) and updated SIU lists. This report should be submitted by March 1.

9.7 DATA MANAGEMENT

It is the responsibility of the DEQ as the Approval Authority to track the POTW's VPDES permit pretreatment requirements and compliance schedule milestones to ensure that schedules for the submission of a program are met. Additionally, appropriate records of SIU inspections and POTW audits must be maintained in DEQ's database. [Appendix T](#) delineates these data management responsibilities. It should be recognized that each region may distribute these responsibilities differently.

9.8 COMPLIANCE/ENFORCEMENT

One of the most significant requirements of pretreatment program implementation is municipal enforcement against industrial users that are in non-compliance. The success of the program requires vigorous enforcement efforts by State and local pretreatment authorities.

Industrial discharge limits established by POTWs with approved pretreatment programs will be enforced initially by the POTWs, but secondarily by the DEQ through the VPDES permit issued to the POTWs. DEQ's program serves as a backup to the local programs and can be implemented at the local level where no local POTW program exists.

Regional offices have primary responsibility for verifying POTW and SIU compliance with applicable standards and requirements. To accomplish this task the regional offices should track the POTWs through the CEDS database system. Enforcement actions should be taken against both POTWs and IUs where necessary to bring them into compliance with all requirements.

This section is intended to assist the regions in evaluating and reporting POTWs' non-compliance with pretreatment requirements and to suggest enforcement actions where violations are of a significant nature. Those POTWs that meet the definition of reportable non-compliance and/or significant non-compliance (as outlined in EPA's 1987 Guidance Document entitled "Guidance for Reporting and Evaluating POTW noncompliance with Pretreatment Implementation Requirements) should be the priorities for enforcement efforts. The definitions are:

Reportable Non-Compliance (RNC) – The EPA has developed criteria to evaluate local program implementation that explain and clarify the existing quarterly non-compliance report rule. These criteria highlight activities that the POTW are required to use to implement their programs.

A POTW must be reported on the quarterly non-compliance report if the violation of its Approved Pretreatment Program, its Virginia Pollution Discharge Elimination System permit, or an enforcement order meets one or more of the following criteria:

1. Pretreatment Permit Issuance

Failed to issue or modify SIU permits for SIUs within 180-days after program approval. Each SIUs' permit must be reissued before the expiration date of the SIU permit, unless legal authority allows for administrative continuance.
2. POTW Compliance Monitoring and Inspections
 - a. Failed to conduct inspections and sampling of SIUs required by the approved program or the State regulations.
 - b. Failed to establish and enforce self-monitoring requirements that are necessary to monitor SIU compliance as required by the Approved Pretreatment Program, the National Pollutant Discharge Elimination System permit or an enforcement order.
3. POTW Enforcement
 - a. Failed to develop, implement and enforce pretreatment standards (both National Categorical Standards and Local Limits) in an effective and timely manner.

- b. Failed to undertake effective enforcement against the SIUs for instances of pass-through, interference or other violations as defined in 9 VAC 25-31, Part VII of the Permit Regulations.
- 4. POTW Reporting to the Approval Authority (DEQ)

Failed to submit a pretreatment report to the State within 30 days of the due date specified in the Virginia Pollution Elimination System permit, enforcement order or approved program.
- 5. Other POTW Implementation Violations
 - a. Failed to complete a pretreatment implementation compliance schedule milestone date within 90 days of the due date.
 - b. Any other violation of local program implementation requirements which the State Director or the EPA Regional Administrator considers to be of substantial concern.

Significant Noncompliance (SNC)- Collectively, the following criteria provide the framework for the definition of significant non-compliance. POTWs with pretreatment violations which meet any level of SNC should either resolve these violations on a timely basis or DEQ should take formal enforcement actions on a timely basis. Furthermore, the POTW should be reported to the compliance auditor if the violations of its approved pretreatment program meet any of the following criteria:

- 1. Failure to enforce against pass-through and interference. The POTW is responsible for identifying and controlling the discharge of pollutants from industrial users that may inhibit or disrupt the plant operations or the use and disposal of sludge. The POTW must monitor the industrial users' contributions and develop local limits to protect its operations against interference, pass through and sludge disposal. The POTW has approved procedures to investigate, control and eliminate interference and pass through. When an industrial user has been identified as a cause of violations, the POTW must respond in a rapid and aggressive manner to avoid continuing problems, consistent with the approved ERP.
- 2. Failure to submit pretreatment reports within 30 days. The term pretreatment report should be interpreted to include any report required by the State from the POTW (including the publishing of significant violators). These reports contain information that helps determine compliance status.
- 3. Failure to meet compliance schedule milestones by 90 days or more. Compliance schedules are frequently used to require construction of additional treatment, corrective action to correct inadequacies in implementation, spill prevention contingencies and counter measure plans, additional monitoring that may be needed to attain compliance, development and revision of local limits and other requirements. The schedules should divide the corrective actions into major steps that can be verified. If the compliance schedule is to resolve a violation that has occurred after the regulatory compliance deadline, the schedule must be placed in an enforcement order.

4. Failure to issue permits to 90 percent of the significant industrial users within 180 days of the required date. Permits establish enforceable limits, monitoring conditions and reporting requirements on the industrial user. Therefore, timely issuance and renewal of all permits is essential. The POTW should issue or renew permits before expiration in accordance with their VPDES permits. POTWs should establish a schedule for industrial users to apply for renewal of the permit so that a timely review and renewal can be accomplished before expiration of the industrial user's permit.
5. Failure to inspect or sample at least 80 percent of the significant industrial users. POTWs are required to carry out all inspections, surveillance and monitoring procedures necessary to verify the compliance status of their industrial user. The VPDES permit requires once a year inspections and sampling. If the POTW has failed to either inspect or sample its industrial users in accordance with the VPDES permit, the POTW should be reported to the compliance auditor for its failure to inspect and sample.
6. Failure to enforce pretreatment standards and reporting requirements. All significant industrial users are required to report twice a year to the POTWs. POTWs must establish self-monitoring in the industrial users permit as a means of securing adequate data to assess the industrial users compliance with its permit. The industrial users self-monitoring must specify the location, frequency and method of sampling of wastewater; the procedure for analysis and calculation of the results; the pollutant limits and the reporting requirements. Self-monitoring should be applied frequently enough so that in combination with the POTW's monitoring, compliance of the significant users can be accurately determined. The POTW must ensure all permit conditions are met, if not the POTW must take appropriate enforcement actions in accordance with the approved ERP. Failure on the part of the POTW to take appropriate enforcement actions will place them in violation of the approved program and permit and should be reported to the compliance auditor. POTW enforcement against industrial users in non-compliance is an essential element of the POTW's approved program and is required by the VPDES permit.

The State should, in the audit and review of the annual report, determine if the POTW is following the approved program and VPDES permit requirements; and whether the program is effective in ensuring compliance with the pretreatment standards. Where the level of SNC of significant industrial users is 15 percent or greater in a six-month period, without formal POTW action and penalties where appropriate, there is a reasonable assumption that overall the POTW is not effectively enforcing its program. This should trigger the review of the ordinance and/or the ERP for adequacy. The region should also review the nature and timeliness of actions taken by the POTW to obtain compliance from individual industrial users. Most ERPs require action within 30 days of becoming aware of the violation. The violations should be corrected within 90 days of the POTW becoming aware that the industrial user is in SNC. If not, the POTW should issue an enforcement order with a compliance schedule for resolution of the non-compliance within 90 days. The regions should review the POTW's overall actions carefully to determine whether they have routinely evaluated the violations and contacted the significant industrial user in a timely manner, escalating the response when compliance is not achieved. Approved local limits are pretreatment standards and are enforceable and a POTW which

fails to enforce the local limits should be reported to the compliance auditor. The same criteria is applied to enforcement of local limits as that applied to the enforcement of the National Categorical Pretreatment Standards.

7. Any other violations of concern to the regional offices might include such violations as failure to update the industrial user inventory, failure to staff the pretreatment program consistent with the approved program or VPDES permit, issuance of a permit of adequate quality, failure to develop or analyze local limits as required by the VPDES permits or enforcement order.

Resources for determining compliance status include: annual reports, audits, industrial inspections, routine enforcement meetings, compliance schedule reports, and Discharge Monitoring Reports (DMRs). Appropriate tracking records should be maintained in DEQ's database (See Appendix T). This provides a means for regions to forecast when reports are due and to detect reporting violations, similar to the process for tracking DMRs and other scheduled events. Most of the data, however, would only be indicative of potential violations. The apparent violations should be verified as a continuing problem before the instance of non-compliance is reported to the compliance auditor. This guidance establishes criteria for determining when a POTW's failure to implement the pretreatment program requirements meets the level of significant non-compliance. In all instances where the violations are judged to be in SNC, the violations must be addressed on a "timely and appropriate" basis. The definition of "timely and appropriate" in the pretreatment program implementation is the same as for VPDES permit violations. That is, the violations must be resolved or the State must take enforcement actions to resolve the violations before the POTW appears on the second Quarterly Non-compliance Report (QNCR).

Multiple POTWs – All POTWs under a pretreatment authority should be assessed for enforcement points for pretreatment program violations.

9.9 PROGRAM REVIEWS

Regional staff will be required to review and approve all aspects of pretreatment programs, some that will come in with the original submission and many that will be submitted later on as the programs undergo change. These elements are discussed in Sections 6 and 8 of this manual and EPA has published a number of guidance documents for their review (See Appendix A).

Whenever new or revised elements of a program are submitted, Section 5 and 6 of this manual should be referenced to determine if and what type of modification that the submission constitutes, and the appropriate procedures should be followed regarding submittal and review deadlines.

9.10 DETERMINATIONS REGARDING CATEGORICAL PRETREATMENT STANDARDS

Pretreatment Regulations set forth specific requirements for industrial users in specified industrial categories which discharge to POTWs (9 VAC 25-31-780). These requirements focus on compliance with federally established, technology-based limits (Categorical Pretreatment Standards) and reporting requirements. Industries in these categories must come into compliance with Categorical Pretreatment Standards no later than three years from the effective date of the appropriate categorical standard. Local and state standards can supersede federal standards if they are more stringent.

Categorical Pretreatment Standards usually contain numerical limitations on the quantities of particular pollutants that may be discharged by any facility in a designated industrial category. The standards are

normally expressed either as concentrations (mg/l) or as mass per unit of production. A complete listing of Categorical Standards can be found in 40 CFR Parts 400 – 471 (See [Appendix E](#)). EPA has issued Categorical Standards for a number of industries and more are being developed.

The driving force behind the development of Categorical Standards is EPA's national program to control discharges of toxic pollutants into the Nation's waters. The general pretreatment regulations provide a framework for application of the categorical regulations to specific industrial users of a POTW. An industrial user can request from the Approval Authority a written certification as to whether they fall within a certain category. Where the POTW makes a determination request, it must notify an affected industrial user who may then comment on the POTW's submission to the Approval Authority. The industrial user must make the request within 60 days after the effective date of the categorical pretreatment standard under which it believes it may be included. In order to be considered complete, the request must contain a statement in accordance with the regulations, describing the subcategory which may be applicable and each statement must contain a certification attesting that the facts provided or submitted are true. If the application is deficient, the regional office must notify the requestor in writing of the deficiency and establish a 30-day time period for correction. If corrections are not made within the prescribed 30 days, a letter of transmittal to the requestor should be prepared for the Regional Director's signature, which states the deficiencies and denies the request.

When all information has been successfully transmitted and reviewed, a subcategory determination should be made, accompanied by the reasons for the decision. Next, a letter of transmittal and copy of the determination package should be sent to the EPA, Region III office. The Regional Director should sign for the Director (Central Office will provide assistance upon request). EPA then has 60 days to waive receipt of the package, veto the determination and to make a final decision on the determination to the requestor. The final step is to prepare a transmittal letter to the requestor of the EPA's decision, for the Regional Director's signature.

Within 30 days of the determination, the POTW or industrial user has the right, which includes the right of a hearing, to contest or to seek reconsideration of an adverse decision from EPA and a final written decision must then be issued.

9.11 ADJUSTMENT DETERMINATIONS FOR CATEGORICAL STANDARDS

DEQ is required to review and provide oversight of various requests for variances and adjustments to Categorical Pretreatment Standards. These must be submitted in writing within 180 days of the effective date of the categorical standard. Reviews must be completed within 60 days of the receipt of the request.

A. Fundamentally Different Factor (FDF) Variance ([Appendix U](#))

One type of variance is based on fundamentally different factors (40 CFR 403.13 of General Pretreatment Regulations and 9 VAC 25-31-850 of the Permit Regulation). To obtain an FDF variance, the industrial user, POTW or other interested party must demonstrate that factors are fundamentally different from those considered by EPA in setting the categorical standards for the user and that the existence of the factors justifies a different discharge limit for the user.

Factors may be considered to be fundamentally different if they are different from what EPA considered in respect to the following:

1. The nature or quality of pollutants that are produced;
2. The volume of the process wastewater and effluent discharged;

3. The environmental impact of control and treatment of the raw waste load rather than water quality impacts;
4. The energy requirement of applying the control and treatment technology;
5. Age, size and land availability and configuration of the user's equipment or facilities; processes employed; process changes; and engineering aspects of the application of control technology; and/or
6. Cost of compliance with required control technology.

In order to obtain an FDF variance for a less stringent limit, the applicant must demonstrate either that cost of compliance with the categorical pretreatment standard would be wholly out of proportion to the removal cost considered by EPA during development of the standard or that compliance with the standard would result in a non-water quality environmental impact fundamentally more adverse than the impact considered in developing the standards. An FDF variance can also be requested to obtain a more stringent pollutant limit. In addition, the applicant must satisfy a number of other requirements which, when taken together, suggests that these variances are the exception rather than the rule.

The Regional Offices should review the requests and transmit a letter to the appropriate EPA official. The letter should be signed by the Regional Director for the Director recommending approval or denial of the request.

The letter must contain sufficient information to justify the recommendation.

B. Net/Gross Determination (Appendix W)

A second type of variance of a categorical standard is referred to as net/gross adjustments (General Pretreatment Regulation, Section 403.15 and Section 9 VAC-25-31-870 of the Permit Regulation). This adjustment may be used to account for significant levels of a pollutant in an industry's intake water. To receive such an adjustment all provisions of 40 CFR 403.15 and Section 9 VAC-25-31-870 of the Virginia Regulation must be met.

The regional offices should review within 30 days the request and draft a letter of response to the POTW approving or denying the request.

C. Removal Credits

The POTW may apply to DEQ for authorization to issue removal credits for certain pollutants. Pollutant eligibility is determined by the POTW's sludge disposal method. Removal credits may be available for any pollutant for a POTW which co-disposes its sludge in a municipal landfill in accordance with 40 CFR Part 258. Part 503 should be referenced for information on land application, distribution and marketing, or incineration. Approval procedures are the same as for pretreatment programs. Removal credits apply only to categorical standards and the application must be in accordance with 40 CFR Part 403.7 (9 VAC 25-31-790 of the Virginia Regulations).

D. Combined Wastestream Formula (CWF) (Appendix V)

Each POTW should inform the Regional Office of instances where it believes the CWF needs to be applied and provide a copy of the calculations resulting in the adjustment of the categorical

standard. In this case, the Regional Office will review the alternative limits calculated using the combined wastestream formula and advise the POTW as to whether to proceed with the application of the alternative limits.

E. Solvent Toxic Organic Management Plan (STOMP) (Appendix X)

Each POTW is responsible for maintaining a copy of all STOMPs submitted by applicable categorical users. The Regional Office should provide the POTW with recommendations regarding acceptance of the STOMP or additional requirements that should be made part of the STOMP. In conducting its review, the Regional Office should follow the criteria outlined in the EPA Guidance Manual for Implementing Total Toxic Organics (TTO) Pretreatment Standards (see Appendix X).

9.12 POLLUTION PREVENTION

Pollution prevention is a very important part of a pretreatment inspector's job. Pollution prevention is a preventive approach to the protection of human health and the environment. The focus of pollution prevention is on minimizing the amount of waste generated as opposed to treating and recycling wastes after generation. The Pollution Prevention Act of 1990 establishes the Pollution Prevention Hierarchy (Strategy) as a national policy, declaring that:

1. Pollution should be prevented or reduced at the source whenever feasible;
2. Pollution that cannot be prevented should be recycled in an environmentally safe manner whenever feasible;
3. Pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and
4. Disposal or other release into the environment should be used only as a last resort and should be conducted in an environmentally safe manner.

Pollution prevention generally encompasses the following areas of endeavor:

1. Process modification, material substitution and product reformulation;
2. Improved process operation and maintenance;
3. Good operating practices (good housekeeping); and
4. Material recycle, reuse and recovery for in-process use.

Waste Minimization is a related term primarily used in connection with hazardous wastes. Waste minimization is the reduction of hazardous waste that is generated or subsequently treated, stored, or disposed of. It includes any activity that results in the reduction of the total volume or quantity of hazardous waste, or the reduction of toxicity of the hazardous waste. Under waste minimization, activities are distinguished between source reduction and recycling.

Industrial waste treatment and pretreatment practices focus on the reduction of pollutant concentrations in wastewater discharged from an industrial facility to minimize its impact on the wastewater treatment plant or the environment. Treatment is basically a remedial process that satisfies health and safety concerns. However, since many waste treatment processes create residual sludge that needs to be landfilled, treatment of industrial wastewater may simply be shifting pollutants from one medium of the environment to another with no net reduction. Pollution prevention is a complementary tool for reducing the discharge of pollutants to a wastewater treatment system or the environment. It has the potential of minimizing or even eliminating a particular pollutant from the wastestream. Good operating practices could minimize the volume of waste entering the treatment system. Material substitution could

eliminate a pollutant altogether and a process change could eliminate a whole wastestream and the associated environmental permit.

A basic component of pollution prevention is identifying pollutant(s) of concern, i.e., pollutants listed in the permit. The inspector should strive to convince industrial and commercial facilities that they can benefit and profit from pollution prevention. In many cases, pollution prevention might be the least expensive means of reducing unacceptable discharges. Pretreatment inspectors can point out the benefits of pollution prevention to the users. Through pollution prevention users can:

1. Reduce waste monitoring, treatment and disposal costs;
2. Reduce raw material use, feedstock purchases and manufacturing costs;
3. Reducing operation and maintenance costs;
4. Increase productivity and reduce off-specification products;
5. Reduce regulatory liability and compliance costs;
6. Reduce hazards to employees through exposure to chemicals;
7. Improve public image and employee moral; and
8. Reduce potential liability associated with toxic/hazardous waste(s).

The role of the pretreatment inspector should be to use pollution prevention as a tool to improve the environmental performance of the user. The inspector should advise the user of sources that will provide the necessary education and tools to conduct a facility pollution prevention assessment. The inspector should be the initial contact to direct the user towards sources that can advise the user on techniques to improve their environmental performance. Through pollution prevention, the inspector may find the tool to modify the user's operation to such a degree that the regulatory burden of a permit becomes unnecessary, thus reducing the workload of both the inspector and the user while protecting our environment.

APPENDICES

- A. EPA Guidance Documents
- B. EPA Program Approval Letter (April 14, 1989)
- C. Memorandum of Agreement between VWCB and EPA (April 12, 1989)
- D. EPA Waiver Letter for Review of Local POTW Program Modification and Approval (January 29, 1991)
- E. 40 CFR - Effluent Guidelines and Standards
- F. Checklist for Reviewing POTW Pretreatment Submissions
- G. Boiler Plate Letters
- H. EPA Memorandum Regarding Nonsubstantial Program Modifications
- I. Public Notice Addresses
- J. EPA Letter Addressing Multiple POTW Programs (July 30, 1993)
- K. Industrial Waste Survey Form and Instructions
- L. Review of Local Limits Development
- M. VWCB Checklist for Inspection of Significant Dischargers
- N. POTW Annual Reporting Format
- O. Safety
- P. Example Inspection Schedule
- Q. VWCB Checklist for Auditing POTW Pretreatment Programs
- R. SNC/Rolling Quarter Explanation
- S. Pretreatment Quarterly Report
- T. Database Management
- U. Review of Fundamentally Different Factors Variance Requests
- V. Use of the Combined Wastestream Formula (CWF)
- W. Review of Net/Gross Calculations
- X. Review of Solvent Toxic Organic Management Plans (STOMP)

APPENDIX A - EPA Guidance Documents

Sources of Information:

1) National Environmental Publications Information (NEPI) home page at www.epa.gov/cincl/.

2) EPA Office of Water Resources Center (WRC)

U.S. Environmental Protection Agency
The Office of Water Resource Center (WRC)
Mail Code 4100
401 M Street , SW
Washington D.C. 20460

(202) 260-7786 (phone)

(202) 260-0386 (fax)

center.water-resourc@epa.gov

3) EPA Region III

Pretreatment Coordinator (3WP24)
U.S. Environmental Protection Agency
1650 Arch Street
Philadelphia, PA 19103-2029

(215) 814-5790 (phone)

(215) 814-2302 (fax)

4) National Technical Information Services (NTIS) 5) National Center for Environmental Publications (NCEP)

National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

(800) 553-NTIS (phone)

(703) 605-6000 (phone)

(703) 321-8547 (fax)

orders@ntis.fedworld.gov

National Center for Environmental Publications
11029 Kenwood Road
Cincinnati, OH 45242

(513) 891-6561 (phone)

6) Educational Resources Information Center (ERIC)

The George Washington University Institute for the Environment
Rice Hall, Suite 603
2121 Eye Street, NW
Washington, DC 20052

(202) 994-3366 (phone)

(202) 994-0723 (fax)

greenue@gwis2.circ.gwu.edu

EPA Publications:

- Aluminum, Copper, and Nonferrous Metals Forming and Metal Powders Pretreatment Standards; December, 1989
- CERCLA Site Dischargers to POTWs Guidance Manual; August, 1990
- Control Authority Pretreatment Audit Checklist and Instructions; May, 1992
- Control of Slug Loadings to POTWs: Guidance Manual; February, 1991
- Environmental Regulations and Technology; The National Pretreatment Program; July, 1986
- Guidance for Conducting a Pretreatment Compliance Inspection; September, 1991
- Guidance for Developing Control Authority Enforcement Response Plans; September, 1989
- Guidance for Reporting and Evaluating POTW Noncompliance with Pretreatment Requirements; September, 1987
- Guidance for Battery Manufacturing Pretreatment Standards; August, 1987
- Guidance Manual for Electroplating and Metal Finishing Pretreatment Standards; February, 1984
- Guidance Manual for Implementing Total Toxic Organics (TTO) Pretreatment Standards; September, 1985

- Guidance Manual for Iron and Steel Manufacturing Pretreatment Standards; September, 1985
- Guidance Manual for Leather and Tanning Pretreatment Standards; September 1986
- Guidance Manual for POTW Pretreatment Program Development; October, 1983
- Guidance Manual for POTWs to Calculate the Economic Benefit of Noncompliance; September, 1990
- Guidance Manual for Preparation and Review of Removal Credit Applications; July, 1985
- Guidance Manual for Preventing Interference at POTWs; September, 1987
- Guidance Manual for Pulp, Paper, and Paperboard and Builders' Paper and Board Mills Pretreatment Standards; July, 1984
- Guidance Manual for the Control of Wastes Hauled to Publicly Owned Treatment Works
- Guidance Manual for the Identification of Hazardous Wastes Delivered to Publicly Owned Treatment Works by Truck, Rail, and Dedicated Pipe; June, 1987
- Guidance Manual for the Use of Production-Based Pretreatment Standards and the Combined Wastestream Formula; September, 1985
- Guidance Manual on the Development and Implementation of Local Discharge Limitations Under the Pretreatment Program; December, 1987
- Guidance on Evaluation, Resolution, and Documentation of Analytical Problems Associated with Compliance Monitoring; June, 1993
- Guidance to Protect Workers from Toxic and Reactive Gases and Vapors; June, 1992
- Guides to Pollution Prevention – Municipal Pretreatment Programs; October, 1993
- Industrial User Inspection and Sampling Manual for POTWs; April, 1994
- Industrial User Permitting Guidance Manual; September, 1989
- Introduction to the National Pretreatment Program; February, 1999
- Model Pretreatment Ordinance; June, 1992
- Multijurisdictional Pretreatment Programs: Guidance Manual; June, 1994
- National Pretreatment Program: Report to Congress; July, 1991
- NPDES Compliance Inspection Manual; September, 1994
- Permitting Guidance for Semiconductor Manufacturing Facilities (April, 1998)
- POTW Sludge Sampling and Analysis Guidance Document; August, 1989
- PRELIM Users Guide, Version 5.0; January, 1997
- Pretreatment Compliance Inspection and Audit Manual for Approval Authorities; July, 1986
- Pretreatment Compliance Monitoring and Enforcement Guidance; September, 1986
- Pretreatment Facility Inspection: A Field Study Training Program; 1991
- Procedures Manual for Reviewing a POTW Pretreatment Program Submission; October, 1993
- RCRA Information on Hazardous Wastes for Publicly Owned Treatment Works; September, 1985
- Report to Congress on the Discharge of Hazardous Wastes to Publicly Owned Treatment Works; February, 1986
- Supplemental Manual on the Development of Local Discharge Limitations Under the Pretreatment Program; Residential and Commercial Toxic Pollutant Loadings and POTW Removal Efficiency Estimation; May, 1991
- Waste Minimization Opportunity Assessment Manual – July, 1988

Miscellaneous Publications

DEQ's Guidance Manual for POTWs (November 9, 1995)

General Pretreatment Regulations (40 CFR 403)

Overview of Selected EPA Regulations and Guidance Affecting POTW Management

Pretreatment Implementation Review Task Force - Final Report to the Administrator (January, 1985)

Nonindustrial Wastewater Pollution Can Be Better Managed - GAO Report (December, 1991)

Action Needed to Control Radioactive Contamination at Sewage Treatment Plants - GAO Report (May 1994)

Performance Measurement and the National Industrial Wastewater Pretreatment Program - AMSA Study (July, 1994)

Improving Industrial Pretreatment: Success Factors, Challenges, and Project Ideas (October, 1996)

Sharing the Load: Effluent Trading for Indirect Dischargers

APPENDIX B - EPA Program Approval Letter, April 14, 1989



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III

841 Chestnut Building
Philadelphia, Pennsylvania 19107

APR 14 1989

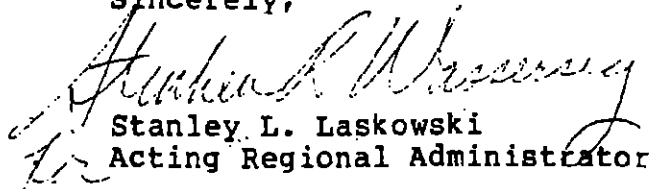
Honorable Gerald L. Baliles
Governor of Virginia
Richmond, Virginia 23219

Dear Governor Baliles:

It is with great pleasure that I am today approving the Commonwealth of Virginia's National Pollutant Discharge Elimination System (NPDES) Pretreatment Program in accordance with the General Pretreatment Regulations for Existing and New Sources of Pollution, 40 CFR Part 403. I am also herewith authorizing the Commonwealth of Virginia to administer the National Pretreatment Program as it applies to municipalities and industries within the Commonwealth.

You and your staff are to be congratulated for the diligent effort put forth in moving to assume administration of this important environmental program. We look forward to working with you and the State Water Control Board in continuing our efforts toward the prevention and control of water pollution in the Commonwealth of Virginia.

Sincerely,


Stanley L. Laskowski
Acting Regional Administrator

cc: Richard Burton SWCB

APPENDIX C – Memorandum of Agreement between VWCB and EPA:
April 12, 1989

MEMORANDUM OF AGREEMENT
BETWEEN THE
VIRGINIA STATE WATER CONTROL BOARD
AND THE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION III

The Memorandum of Agreement (MOA) between the Virginia State Water Control Board (hereinafter SWCB) and the Administrator of the United States Environmental Protection Agency (hereinafter EPA) and approved on March 31, 1975 and amended on February 9, 1982, is hereby modified to define the SWCB and EPA responsibilities for the establishment, implementation and enforcement of the National Pretreatment Program pursuant to Section 307, and 402(B) of the Clean Water Act (hereinafter the Act) as follows:

The SWCB has primary responsibility for:

- (a) Enforcing against prohibitive discharges in accordance with the Act;
- (b) Applying and enforcing National Categorical Pretreatment Standards established by the EPA in accordance with Section 307(b) and (c) of the Act, local Publicly Owned Treatment Works (POTW) standards and State standards, whichever apply or are more stringent;
- (c) Reviewing and approving POTW Pretreatment Programs in accordance with the Act;
- (d) Requiring, where appropriate, Pretreatment Program development and implementation in NPDES permits issued to POTWs;
- (e) Overseeing POTW Pretreatment Programs in accordance with the Act;
- (f) Regulating industrial dischargers to POTWs without Pretreatment Programs;
- (f) Requiring industrial waste surveys in accordance with the Act; and
- (h) Requiring POTWs with approved Pretreatment Programs, or those developing a program, to develop and enforce specific limits upon all industrial users where pollutants cause interference or pass-through to ensure compliance with the NPDES permits.

EPA will oversee the SWCB Pretreatment Program operations consistent with the Act and this MOA.

The SWCB shall perform inspection, surveillance and monitoring activities which will determine, independent of information supplied by the POTW, compliance and non-compliance by the POTW with pretreatment requirements incorporated into the

POTW permit; and carry out inspection, surveillance and monitoring activities which will determine, independent of information supplied by the industrial user, whether the industrial user is in compliance with Pretreatment Standards.

The EPA Regional Water Division Director will be provided 30 days to review and comment upon, object to, or make recommendations with respect to proposed major POTW NPDES permits or modifications and pretreatment conditions. However, if the Water Division Director so requests in writing, an additional 30 days shall be given for such review. The EPA Regional Water Division Director shall notify the SWCB in writing within the allowed period that the EPA concurs or objects to the State's determination. If EPA objects to certain conditions it shall set forth the reasons for the objection(s) and the action(s) that must be taken by the SWCB to remove the objection.

National Pretreatment Standards: Categorical Standards

The SWCB shall review requests from industrial users or POTWs for certification as to whether the industrial user does or does not fall within a particular industrial category. The SWCB will make a written determination for each request stating the reasons for the determination. The SWCB shall then forward its findings, together with a copy of the request and any necessary supporting information, to the EPA Regional Water Division Director for concurrence. If the Water Division Director does not overrule the SWCB decision within 60 days after receipt thereof, the SWCB findings are final. When the original request is submitted to the EPA Water Division Director such requests will be forwarded to the SWCB for an initial determination then sent back to EPA for concurrence. Where the Water Division Director elects to overrule the SWCB decision, the Water Division Director's determination will be forwarded to SWCB for review.

The State Agency will have 30 days from the receipt of the determination to comment. At the end of that period, the Water Division Director shall consider any comments received and shall make a final determination. A copy of the final determination shall be sent to the requestor and to the SWCB.

Variances from Categorical Pretreatment Standards for Fundamentally Different Factors

The SWCB shall make an initial finding on all requests from industrial users for variances from categorical Pretreatment Standards, where the request is based on the allegation of the existence of fundamentally different factors. Where the SWCB's initial finding is to approve the request, the finding, together with the request and supporting information, shall be forwarded to the EPA Regional Water Division Director for a final determination. The SWCB may deny, but not approve and implement the fundamentally different factor(s) variance request until written approval has been received from the Water Division Director.

Net/Gross

Any pretreatment request for net/gross determinations received by the SWCB will be forwarded to the EPA Water Division Director for determination of eligibility.

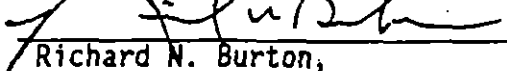
Other Provisions

Nothing in this agreement is intended to affect any pretreatment requirement, including any standards or prohibitions established by State or local law, as long as the State or local requirements are not less stringent than any set forth in the National Pretreatment Program, or other requirements or prohibitions established under the Act or Federal regulations.

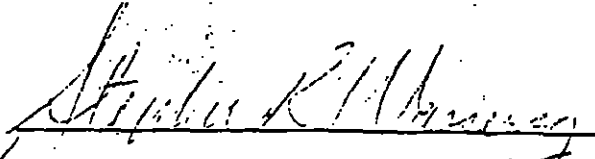
Nothing in this modification shall be construed to limit the authority of the EPA to take action pursuant to Sections 204, 208, 301, 304, 306, 307, 308, 309, 311, 402, 404, 405, 501, or other Sections of the Act (33 U.S.C. 1251 et seq).

The Virginia State Water Control Board will update its Pretreatment Regulation to assure its compatibility with federal regulations.

This modification will become effective upon the U.S. EPA Regional Administrator's approval of the SWCB's Pretreatment Program application.

By: 
Richard N. Burton,
Executive Director
Virginia State Water Control Board

Date: 7/3/89

By: 
Regional Administrator, Region VII
U.S. Environmental Protection Agency

Date: 4/12/89

APPENDIX D – EPA Waiver Letter for Review of Local POTW Program
Modification and Approval, January 29, 1991



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

JAN 29 1991

LaVern H. Corkran
Environmental Engineer Consultant
Office of Engineering Applications
Virginia State Water Control Board
2111 North Hamilton Street
P.O. Box 11143
Richmond, VA 23230-1143

Dear Corky:

This letter is to clarify the role of Region III in the pretreatment program in Virginia. The Permits Enforcement Branch does not have the resources to review and comment on local program modifications and approvals. Specific cases may cause us to request copies of program documents from time to time, however this would be the exception rather than the rule. These files remain subject to review as part of periodic oversight inspection of the SWCB program.

Region III and its pretreatment coordinator will try to assist you and give you guidance to enable the Board to carry out the responsibilities delegated to you. We have every confidence that you will continue to do the thorough job on these reviews that you have in the past.

If you have any questions, feel free to contact me at (215) 597-8211.

Sincerely,

Kenneth J. Cox, Chief
Program Development Section

APPENDIX E – Effluent Guidelines and Standards

Alphabetically

Aluminum Forming 40 CFR Part 467
Asbestos Manufacturing 40 CFR Part 427
Battery Manufacturing 40 CFR Part 461
Canned and Preserved Fruits and Vegetables 40 CFR Part 407
Canned and Preserved Seafood 40 CFR Part 408
Carbon Black Manufacturing 40 CFR Part 458
Centralized Waste Treatment 40 CFR Part 437
Cement Manufacturing 40 CFR Part 411
Coal Mining 40 CFR Part 434
Coil Coating 40 CFR Part 465
Copper Forming 40 CFR Part 468
Dairy Products 40 CFR Part 405
Electrical and Electronic Components 40 CFR Part 469
Electroplating 40 CFR Part 413
Explosives Manufacturing 40 CFR Part 457
Feedlots 40 CFR Part 412
Ferroalloy Manufacturing 40 CFR Part 424
Fertilizer Manufacturing 40 CFR Part 418
Glass Manufacturing 40 CFR Part 426
Grain Mills 40 CFR Part 406
Gum and Wood Chemicals Manufacturing 40 CFR Part 454
Hospitals 40 CFR Part 460
Ink Formulating 40 CFR Part 447
Inorganic Chemicals Manufacturing 40 CFR Part 415
Iron and Steel Manufacturing 40 CFR Part 420
Landfills 40 CFR Part 445
Leather Tanning and Finishing 40 CFR Part 425
Meat Products 40 CFR Part 432
Metal Finishing 40 CFR Part 433
Metal Molding and Casting 40 CFR Part 464
Mineral Mining and Processing 40 CFR Part 436
Nonferrous Metals 40 CFR Part 421
Nonferrous Metal Forming 40 CFR Part 471
Oil and Gas Extraction 40 CFR Part 435
Ore Mining and Dressing 40 CFR Part 440
Organic Chemicals, Plastics and Synthetic Fibers 40 CFR Part 414
Paint Formulating 40 CFR Part 446
Paving and Roofing Materials 40 CFR Part 443
Pesticide Chemicals 40 CFR Part 455
Petroleum Refining 40 CFR Part 419
Pharmaceutical Manufacturing 40 CFR Part 439
Phosphate Manufacturing 40 CFR Part 422
Photographic Processing 40 CFR Part 459
Plastics Molding and Forming 40 CFR Part 463
Porcelain Enameling 40 CFR Part 466
Pulp, Paper and Paperboard 40 CFR Part 430
Rubber Processing 40 CFR Part 428
Secondary Treatment 40 CFR Part 133
Soaps and Detergents 40 CFR Part 417
Steam Electric Power Generation 40 CFR Part 423
Sugar Processing 40 CFR Part 409
Textile Mills 40 CFR Part 410
Timber Products 40 CFR Part 429
Toxic Pollutant Effluent Standards 40 CFR Part 129
Transportation Equipment Cleaning 40 CFR Part 442
Waste Combustors 40 CFR Part 444

Numerically (40 CFR Part....)

129 - Toxic Pollutants
133 - Secondary Treatment
405 - Dairy Products
406 - Grain Mills
407 - Canned and Preserved Fruits and Vegetables Processing
408 - Canned and Preserved Seafood Processing
409 - Sugar Processing
410 - Textile Mills
411 - Cement Manufacturing
412 - Feedlots
413 - Electroplating
414 - Organic Chemicals, Plastics, and Synthetic Fibers
415 - Inorganic Chemicals Manufacturing
417 - Soap and Detergent Manufacturing
418 - Fertilizer Manufacturing
419 - Petroleum Refining
420 - Iron and Steel Manufacturing
421 - Nonferrous Metals Manufacturing
422 - Phosphate Manufacturing
423 - Steam Electric Power Generating
424 - Ferroalloy Manufacturing
425 - Leather Tanning and Finishing
426 - Glass Manufacturing
427 - Asbestos Manufacturing
428 - Rubber Manufacturing
429 - Timber Products Processing
430 - Pulp, Paper, and Paperboard
432 - Meat Products
433 - Metal Finishing
434 - Coal Mining
435 - Oil and Gas Extraction
436 - Mineral Mining and Processing
437 - The Centralized Waste Treatment
439 - Pharmaceutical Manufacturing
440 - Ore Mining and Dressing
442 - Transportation Equipment Cleaning
443 - Paving and Roofing Materials (Tars and Asphalt)
444 - Waste Combustors
445 - Landfills
446 - Paint Formulating
447 - Ink Formulating
454 - Gum and Wood Chemicals Manufacturing
455 - Pesticide Chemicals
457 - Explosives Manufacturing
458 - Carbon Black Manufacturing
459 - Photographic Processing
460 - Hospital
461 - Battery Manufacturing
463 - Plastics Molding and Forming
464 - Metal Molding and Casting
465 - Coil Coating
466 - Porcelain Enameling
467 - Aluminum Forming
468 - Copper Forming
469 - Electrical and Electronic Components
471 - Nonferrous Metals Forming and Metal Powders

APPENDIX F – Checklist for Reviewing POTW Pretreatment Submissions

9 VAC 25-31-810 B.1.-4. POTW Pretreatment Programs and/or Authorization to Revise Pretreatment Standards: Submission for Approval

A. A POTW requesting approval of a POTW Pretreatment Program shall develop a program description which includes the information set forth in paragraphs B.1. through 4. of this section.

Regulation Citation	Regulation Requirements		YES	Section of POTW's Submission	NO
B.1.	Does the submission contain a statement from the City Solicitor or a city official acting in a comparable capacity (or the attorney for those POTW's which have independent legal counsel) that the POTW has authority adequate to carry out the programs described in 9 VAC 25-31-800?				
B.1.a.	Does the statement identify the provision of the legal authority under 9 VAC 25-31-800 F.1. which provides the basis for each procedure under 9 VAC 25-31-800 F.2?				
	9 VAC 25-31-800 F. LEGAL AUTHORITY				
	F.1.	Does the POTW operate pursuant to legal authority enforceable in federal, state or local courts, which authorizes or enables the POTW to apply and to enforce the requirements of Sections 307(b), (c) and (d), and 402(b)(8) of the CWA and any regulations implementing those sections? (Such authority may be contained in a statute or ordinances which the POTW is authorized to enact, enter into or implement, and which are authorized by state law.)			
	F.1.a.	Does the legal authority enable the POTW to deny or condition new or increased contributions of pollutants, or changes in the nature of pollutants to the POTW by Industrial Users where such contributions do not meet applicable Pretreatment Standards and Requirements or where such contributions would cause the POTW to violate its VPDES permit:			
	F.1.b.	Does the legal authority require compliance with applicable Pretreatment Standards, and Requirements by Industrial Users?			
	F.1.c.	Does the legal authority control through permit, or order the contribution to the POTW by each industrial User to ensure compliance with applicable Pretreatment Standards and Requirements? (In the case of Industrial Users identified as significant 9 VAC 25-31-10, this control shall be achieved through permits or equivalent individual control mechanisms issued to each such user.) Such control mechanisms must be enforceable and contain, at a minimum, the following conditions:			
	F.1.c.(1)	Is a statement of duration (in no case more than five years) included?			
	F.1.c.(2)	Is there a statement of non-transferability without, at a minimum, prior notification to the POTW and provision of a copy of the existing control mechanism to the new owner or operator?			
	F.1.c.(3)	Are the effluent limits based on applicable general pretreatment standards in this part, categorical pretreatment standards, local limits, and the Law?			
	F.1.c.(4)	Are the self-monitoring, sampling, reporting, notification and record keeping requirements, including an identification of the pollutants to be monitored, sampling location, sampling frequency, and sample type, based on the applicable general pretreatment standards in this part, categorical pretreatment standards, local limits, and the Law?			
	F.1.c.(5)	Is a statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements included?			
	F.1.c.(6)	Are there any applicable compliance schedules (which may not extend beyond applicable federal deadlines)?			
	F.1.d.(1)	Does the legal authority require the development of a compliance schedule by each Industrial User for the installation of technology required to meet applicable Pretreatment Standards and Requirements?			
	F.1.d.(2)	Does the legal authority require the submission of all notices and self-monitoring reports from Industrial Users as are necessary to assess and assure compliance by Industrial Users with Pretreatment Standards and Requirements, including but not limited to the reports required in 9 VAC 25-31-840?			
	F.1.e.	Does the legal authority, at a minimum, allow the POTW to carry out all inspection, surveillance and monitoring procedures necessary to determine, independent of information supplied by Industrial Users, compliance or noncompliance with applicable Pretreatment Standards and Requirements by Industrial Users? Representatives of the POTW shall be authorized to enter any premises of any Industrial U			
	F.1.f.	Does the legal authority, at a minimum, allow the POTW to obtain remedies for noncompliance by any IU with any Pretreatment Standard and Requirement? All POTWs shall also have the authority to seek or assess civil or criminal penalties in at least the amount of \$1,000 a day for each violation, and (after informal notice to the discharger) to immediately and effectively halt or prevent any discharge of pollutants to the POTW which reasonably appears to present an imminent endangerment to the health or welfare of persons, or which presents (or may present) an endangerment to the environment, or which threatens to interfere with the operation of the POTW.			

Regulation Citation	Regulation Requirements		YES	Section of POTW's Submission	NO
	F.1.g.	Does the legal authority, at a minimum, comply with the confidentiality requirements set forth in 9 VAC 25-31-860? (Any information submitted to the DEQ pursuant to this part may be claimed as secret formulae, secret processes or secret methods, other than effluent data, by the submitter. Any such claim will be considered under the conditions of 9 VAC 25-31-80 – see remainder of paragraph. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words “secret formulae, secret processes or secret methods” on each page containing such information. Claims of confidentiality for the following information will be denied: name and address of any permit applicant or permittee; permit applications, permits, and effluent data; and information required by VPDES application forms and any attachments used to supply information required by the forms.)			
B.1.b.	Does the program description identify the manner in which the POTW will implement the program requirements set forth in 9 VAC 25-31-800, including the means by which Pretreatment Standards will be applied to individual Industrial Users?				
	9 VAC 25-31-800 F.2. PROCEDURES				
	F.2.	Has the POTW developed and implemented procedures to ensure compliance with the requirements of a Pretreatment Program?			
	F.2.a.	At a minimum, do these procedures enable the POTW to identify and locate all possible IUs which might be subject to the POTW Pretreatment Program? Any compilation, index or inventory of IUs made under this paragraph shall be made available to the DEQ upon request.			
	F.2.b.	At a minimum, do these procedures enable the POTW to identify the character and volume of pollutants contributed to the POTW by the IUs identified under F.2.a.? This information shall be made available to the DEQ upon request.			
	F.2.c.	At a minimum, do these procedures enable the POTW to notify IUs identified under F.2.a. of this section, of applicable Pretreatment Standards and any applicable requirements under Sections 204(b) and 405 of the CWA and Subtitles C and D of the RCRA? Within 30 days of approval pursuant to 9 VAC 25-31-800 F.6. of a list of Significant Industrial Users, notify each SIU of its status as such and of all requirements applicable to it as a result of such status.			
	F.2.d.	At a minimum, do these procedures enable the POTW to receive and analyze self-monitoring reports and other notices submitted by IUs in accordance with the self-monitoring requirements in 9 VAC 25-31-840 (See Reporting Requirements for POTWs and Industrial Users)?			
	F.2.e.	At a minimum, do these procedures enable the POTW to randomly sample and analyze the effluent from industrial users and conduct surveillance activities in order to identify, independent of information supplied by industrial users, occasional and continuing non-compliance with pretreatment standards?			
		At a minimum, do these procedures enable the POTW to inspect and sample the effluent from each SIU at least once a year?			
		At a minimum, do these procedures enable the POTW to evaluate, at least once every two years, whether each such SIU needs a plan to control slug discharges? A slug discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or non-customary batch discharge.			
	F.2.e.(1)	If the POTW decides that a slug control plan is needed, will the plan contain, at a minimum, a description of discharge practices, including non-routine batch discharges?			
	F.2.e.(2)	If the POTW decides that a slug control plan is needed, will the plan contain, at a minimum, a description of stored chemicals?			
	F.2.e.(3)	If the POTW decides that a slug control plan is needed, will the plan contain, at a minimum, procedures for immediately notifying the POTW of slug discharges, including any discharge that would violate a prohibition under 9 VAC 25-31-770 B (pollutants which create a fire or explosion hazard; corrosive structural damage; discharges with pH lower than 5.0; solid or viscous pollutants in amounts which will cause obstruction to the flow resulting in interference; any pollutant, including oxygen demanding pollutants like BOD, released in a discharge at a flow rate and/or pollutant concentration which will cause interference; heat in amounts which will inhibit biological activity; heat in such quantities that the temperature at the POTW exceeds 40°C or 104°F; petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through; pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; or any trucked or hauled pollutants, except at discharge points designated by the POTW), with procedures for follow-up written notification within five days?			

Regulation Citation	Regulation Requirements		YES	Section of POTW's Submission	NO
	F.2.e.(4)	If the POTW decides that a slug control plan is needed, will the plan contain, at a minimum, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment necessary for emergency response?			
	F.2.f.	At a minimum, do these procedures enable the POTW to investigate instances of noncompliance with Pretreatment Standards and Requirements, as indicated in the reports and notices required under 9 VAC 25-31-840, or indicated by analysis, inspection, and surveillance activities described in paragraph F.2.e. of this section. Sample taking and analysis and the collection of other information shall be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions.			
	F.2.g.	At a minimum, do these procedures enable the POTW to comply with the public participation requirements of the Code of Virginia and 40 CFR Part 25 (1999) in the enforcement of national pretreatment standards? These procedures shall include provision for at least annual public notification, in the largest daily newspaper published in the municipality in which the POTW is located, of industrial users which, at any time during the previous twelve months were in significant noncompliance with applicable pretreatment requirements. An IU is in Significant Noncompliance (SNC) if its violation meets one or more of the following: (1) Chronic violations of limits - 66% or more of measurements taken during a 6-month period equal or exceed the daily max or the average limit (2) Technical Review Criteria (TRC) – 33% or more of the pollutant measurements taken during a 6-month period equal or exceed the product of the daily max or average limit times the applicable TRE (1.4 or 1.2) (3) Any other violation of a pretreatment effluent limit that has been determined to cause interference or pass through (including endangering the health of POTW personnel or general public) (4) Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the POTW halting or preventing the discharge (5) Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance (6) Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules (7) Failure to accurately report noncompliance (8) Any other violation or group of violations which the Control Authority determines will adversely affect the operation or implementation of the local pretreatment program			
B.1.c.	Identify how the POTW intends to ensure compliance with Pretreatment Standards and Requirements, and to enforce them in the event of noncompliance by Industrial Users.				
9 VAC 25-31-800 F. 4. LOCAL LIMITS					
	F.4.	Has the POTW developed local limits as required in 770 C.1. using current influent, effluent and sludge data, or demonstrated that they are not necessary?			
9 VAC 25-31-800 F.5. ENFORCEMENT RESPONSE PLAN ERP					
	F.5.	Has the POTW developed and implemented an enforcement response plan? This plan shall contain detailed procedures indicating how a POTW will investigate and respond to instances of industrial user noncompliance.			
	F.5.a.	Does the plan, at a minimum, describe how the POTW will investigate instances of noncompliance?			
	F.5.b.	Does the plan, at a minimum, describe the types of escalating enforcement responses the POTW will take in response to all anticipated types of industrial user violations and the time periods within which responses will take place?			
	F.5.c.	Does the plan, at a minimum, identify (by title) the official(s) responsible for each type of response?			
	F.5.d.	Does the plan, at a minimum, adequately reflect the POTW's primary responsibility to enforce all applicable pretreatment requirements and standards as detailed in 800 F.1. and F.2.?			
B.2.	A copy of any statutes, ordinances, regulations, agreements or other authorities relied upon by the POTW for its administration of the Program which meet the requirements of 9 VAC 25-31-800 F.1. This Submission shall include a statement reflecting the endorsement or approval or the local boards or bodies responsible for supervising and/or funding the POTW Pretreatment Program if approved.				

Regulation Citation	Regulation Requirements		YES	Section of POTW's Submission	NO
	9 VAC 25-31-800 F.3. FUNDING				
	F.3.	Does the POTW have sufficient resources and qualified personnel to carry out the authorities and procedures described in F.1. and F.2. above? In some limited circumstances, funding and personnel may be delayed where the POTW has adequate legal authority and procedures to carry out the Pretreatment Program. (see 810 B. and C.)			
		Does the POTW have a workable organization to integrate elements of the program? *			
		Is there a staff of appropriate size and training to carry out program requirements? *			
		Are there necessary equipment and supplies to fulfill monitoring and other program needs? *			
		Are there adequate funds to support the program? *			
	B.3.	Is there a brief description (including organization charts) of the POTW organization which will administer the Pretreatment Program? If more than one agency is responsible for administration of the Program the responsible agencies shall be identified, their respective responsibilities delineated, and the procedures for coordination set forth in an interjurisdictional agreement.			
		Is there an employee or contractor assigned to sampling and inspection duties? *			
		Is there an employee or contractor assigned to perform laboratory analysis? *			
		Is there an employee or contractor assigned to provide the legal assistance? *			
		Is there an employee or contractor assigned to provide for program administration? *			
		Is there an employee designated to provide legal assistance to the POTW, and to initiate formal legal formal legal actions against violators, including injunctive relief when necessary? *			
	B.4.	Is there a description of the funding levels and full and part-time manpower available to implement the Program?			
		Have costs been estimated for procurement, operation, and maintenance of necessary sampling and analytical equipment? *			
		Have costs been estimated for sampling and monitoring of the IUs and POTW systems? *			
		Have costs been estimated for laboratory analysis (both in-house and contract services? *			
		Have costs been estimated for technical assistance? *			
		Have costs been estimated for legal assistance? *			
		Have costs been estimated for program administration? *			
	* =	Taken from the EPA Guidance Manual for POTW Program Development, Oct 1983			

DEQ Sewer Use Ordinance Checklist

County/Town of _____ – Sewer Use Ordinance Adopted _____

EPA's Model Ordinance may be used but care should be given that it is customized to the individual POTW and it should be noted that all sections are not mandatory. The EPA model ordinance and legal authority checksheets can be found at <http://www.epa.gov/reg3wapd/pretreatment/downloads.htm>.

Regulation Requirements	EPA Model Ordinance Location	<u>Y / N</u>	<u>Submitted Ordinance Location</u>	<u>Comments</u>
A. DEFINITIONS (TO ESTABLISH PROGRAM SCOPE)				
1. Interference [9 VAC 25-31-10]	1.4 L.	Y	Div II, Sect 92	
2. Pass-through [9 VAC 25-31-10]	1.4 P.	Y	Div II, Sect 92	
3. Industrial user (or equivalent) [9 VAC 25-31-10] ("User" in EPA MO)	1.4 GG.	Y	Div II, Sect 92	
4. New source [9 VAC 25-31-10]	1.4 N.	Y	Div II, Sect 92	
5. Categorical Pretreatment Standards (or equivalent) [9 VAC 25-31-10]	1.4 E.	Y	Div II, Sect 92	
6. Significant industrial user [9 VAC 25-31-10]	1.4 AA.	Y	Div II, Sect 92	
7. Significant non-compliance [9 VAC 25-31-800 F.2.g] (Optional)	9. A – H.	Y	Div II, Sect 92	
8. Slug Load or Slug [9 VAC 25-31-800.F.2.e & 9 VAC 25-31-840.F]	1.4 BB.	Y	Div II, Sect 92	
9. Pretreatment Requirement [9 VAC 25-31-10] (New in 2001(EPAMO))	1.4 U.	Y	Div II, Sect 92	
B. REGULATIONS AND PROCEDURES REGARDING BUILDING SEWERS AND CONNECTIONS [CAP LOAN/GRANTS REQUIREMENTS]				
1. Prohibitions on new inflow sources (PT Optional)	No	Y	Div IV, Sect 108	
2. Removal of existing inflow/infiltration sources (PT Optional)	No	N	-	
3. Permit for building sewers (PT Optional)	No	Y	Div IV, Sect 108	
4. Building sewer materials and construction standards (PT Optional)	No	Y	Div IV, Sect 106 & 109	
5. Inspections (PT Optional)	No	Y	Div IV, Sect 110	
C. INDUSTRIAL USER REQUIREMENTS/PROHIBITIONS				
1. General prohibition against Pass Through (9 VAC 25-31-770.A.1)	2.1.A	Y	Div V, Sect 123	
2. General prohibition against Interference (9 VAC 25-31-770.A.1)	2.1.A	Y	Div V, Sect 123	
3. General prohibition against violation of Water Quality Standards (9 VAC 25-31-770.A.1) (New in 2001(Not in EPAMO))	No	N	-	
4. Specific prohibition against fire/explosion hazards (9 VAC 25-31-770.B.1)	2.1.B.(1)	Y	Div V, Sect 124 (D)(1)	
5. Specific prohibition against pH/Corrosion (9 VAC 25-31-770.B.2)	2.1.B.(2)	Y	Div V, Sect 124 (D)(2)	
6. Specific prohibition against Solid or viscous obstruction (9 VAC 25-31-770.B.3)	2.1.B.(3)	Y	Div V, Sect 124 (D)(3)	
7. Specific prohibition against Flow rate/concentration (BOD, etc.) (9 VAC 25-31-770.B.4)	2.1.B.(4)	Y	Div V, Sect 124 (D)(4)	
8. Specific prohibition against Heat excedence (9 VAC 25-31-770.B.5)	2.1.B.(5)	Y	Div V, Sect 124 (D)(5)	
9. Specific prohibition against Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin (9 VAC 25-31-770.B.6)	2.1.B.(6)	Y	Div V, Sect 124 (D)(6)	
10. Specific prohibition against Fume toxicity (9 VAC 25-31-770.B.7)	2.1.B.(7)	Y	Div V, Sect 124 (D)(8)	
11. Specific prohibition againstTrucked or hauled pollutants (9 VAC 25-31-770.B.8)	2.1.B.(8), 3.4	Y	Div V, Sect 124 (D)(13)	
12. Prohibition of dilution as a substitution for treatment(9 VAC 25-31-780.D)	2.6	Y	Div V, Sect 128	
13. Duty to report slug loadings (9 VAC 25-31-840.F) (New in 2001(EPAMO))	6.6	Y	Div V, Sect 129	
14. Duty to notify POTW of change in nature of discharge (9 VAC 25-31-840 J.)	6.5, 6.6, 6.9	Y	Div V, Sect 156	

Regulation Requirements	EPA Model Ordinance Location	Y / N	Submitted Ordinance Location	Comments
15. Duty to notify POTW of discharge of hazardous waste (9 VAC 25-31-840 P)		Y	Div V, Sect 160	
16. Duty to supply baseline monitoring reports (9 VAC 25-31-840.B) (CAP Optional)	6.1	Y	Div VII, Sect 152	
A. Identifying information (9 VAC 25-31-840.B.1) (New in 2001(EPAMO))	6.1	Y	Div VII, Sect 152.B.1	
B. Permits held (9 VAC 25-31-840.B.2) (New in 2001(EPAMO))	6.1	Y	Div VII, Sect 152.B.2	
C. Description of Operations (9 VAC 25-31-840.B.3) (New in 2001(EPAMO))	6.1	Y	Div VII, Sect 152.B.3	
D. Flow Measurement (9 VAC 25-31-840.B.4) (New in 2001(EPAMO))	6.1	Y	Div VII, Sect 152.B.4	
E. Measurement of Pollutants (9 VAC 25-31-840.B.5) (New in 2001(EPAMO))	6.1	Y	Div VII, Sect 152.B.5	
F. Certification (9 VAC 25-31-840.B.6) (New in 2001(EPAMO))	6.1	Y	Div VII, Sect 152.B.6	
G. Compliance Schedule (9 VAC 25-31-840.B.7 & C) (New in 2001(EPAMO))	6.1, 6.2	Y	Div VII, Sect 152.B.7	
17. Duty to report on compliance with categorical deadlines (9 VAC 25-31-840 C). (This should include provisions listed in 15.D- 15.G. above)	6.3	Y	Div VII, Sect 154	
18. Duty of categorical users to supply periodic compliance reports (9 VAC 25-31-840 E) (EPA MO 6.4 covers both cat and non cat)	6.4	Y	Div VII, Sect 155	
19. Duty to report for significant noncategorical industrial users (9 VAC 25-31-840 H) (EPA MO 6.4 covers both cat and non cat)	6.4	Y	Div VII, Sect 143.I.1.c.	
20. Duty to supply proper signature on industrial user reports (9 VAC 25-31-840 L)	4.6	Y	Div VII, Sect 155.A.; Div V, Sect 131	
21. Duty to supply proper certification on industrial user reports (9 VAC 25-31-780 A.2.b & 9 VAC 25-31-840 L)	4.6	Y	Div VII, Sect 155.A.; Div V, Sect 131	
22. Duty to maintain monitoring activity records (9 VAC 25-31-840 O) (CAP Optional)	6.13	Y	Div VII, Sect 164	
23. Duty to conduct representative sampling (9 VAC 25-31-840.G.3) (New in 2001(EPAMO))	6.4	Y	Div VII, Sect 162	
24. Duty to perform sampling and analysis in accordance with 40 CFR Part 136 (9 VAC 25-31-840 B.5.f) (New in 2001(EPAMO))	6.10	Y	Div VII, Sect 161	
25 Duty to notify DEQ of violation and to resample (9 VAC 25-31-840 G.2) (New in 2001(EPAMO))	6.8	Y	Div VII, Sect 159	
26 Duty to report all monitoring data (New in 2001(EPAMO))	6.4	Y	Div VII, Sect 155.C.	
D. ESTABLISHED POTW AUTHORITY/DUTIES				
1. To deny/condition new or increased contributions (9 VAC 25-31-800.F.1.a)	4.7	Y	Div VI, Sect 143; Div VII, Sect A.7; Div X, Sect 192	
2. To Incorporate/Develop local limits (9 VAC 25-31-770 C.1 & 2) (CAP Optional. MO includes LL in text. It is recommended that they incorporate by reference.)	2.4	N	-	
3. To require compliance with pretreatment standards (9 VAC 25-31-800.F.1.b). (MO only incorporates Cat Stds and doesn't mention other PS.)	2.3	Y	Div III, Sect 95; Div VIII, Sect 172	
4. To issue permits to SIU's to ensure compliance (9 VAC 25-31-800.F.1.c)	4.2, 4.3, 4.4, 4.7. 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7	Y	Div VI, Sect 143 and 173	
5. To require development of compliance schedule for installation of pretreatment facilities (9 VAC 25-31-800.F.1.d)	6.1, 6.2, 6.3	Y	Div VIII, Sect 172 A.3	

Regulation Requirements	EPA Model Ordinance Location	<u>Y / N</u>	<u>Submitted Ordinance Location</u>	<u>Comments</u>
6. To require self monitoring reports from industrial users (9 VAC 25-31-800.F.1.d) (Not on MO checksheet)	4.1	Y	Div VIII, Sect 172 A.4	
7. To enter at reasonable times (9 VAC 25-31-800.F.1.e), (CWA Section 308)	7.1	Y	Div VIII, Sect 172 A.5	
8. To inspect generally for compliance (9 VAC 25-31-800.F.1.e), (CWA Section 308) (CAP Optional)	7.1	Y	Div VIII, Sect 172 A.5	
9. To take independent samples (9 VAC 25-31-800.F.1.e), (CWA Section 308)	7.1.(B,C)	Y	Div VIII, Sect 172 A.5	
10. To require the installation of monitoring equipment (9 VAC 25-31-800.F.1.e), (CWA Section 308)	7.1.(B)	Y	Dov VO. Sect 145.L	
11. To inspect and copy records (CWA Section 308), (9 VAC 25-31-800.F.1.e), (CWA Section 308)	7.1	Y	Div VI, Sect 142.B	
12. Authority to comply with confidentiality requirements set forth in 9 VAC-25-31-860 (9 VAC 25-31-800.F.1.g), (9 VAC 25-31-860), & (9 VAC 25-31-80)	8	Y	Div VI, Sect 142.C	
13. To require the development of a spill prevention and control plan for industrial users (9 VAC 25-31-800.F.1.e)	3.3	Y	Div V, Sect 129	
14. To seek injunctive relief for noncompliance with pretreatment standards (9 VAC 25-31-800.F.1.f)	11.1	Y	Div VIII, Sect 172.A.6	
15.To seek civil or criminal penalites of \$1000 a day per violation of pretreatment standards and requirements (9 VAC 25-31-800.F.1.f)	11.2	Y	Div VIII, Sect 172 A.6	
16. To immediately and effectively halt or prevent discharge activity (9 VAC 25-31-800.F.1.f)	10.7, 10.8	Y	Div VIII, Sect 172 A.7	
17. To use administrative authority (9 VAC 25-31-800.F.1.f) (Optional)	10.6	N	-	

[Additional Comments:](#)

APPENDIX G – Boiler Plate Letters and Public Notices

CORRESPONDENCE INSTRUCTIONS

1. For Notice Of Intent To Approve (Modify) Program

A. Mail To Permittee:

- Letter for notification of intent
- Authorization to bill for public notice(s)
- Copy of public notice of proposed action
- Copy of public notice of DEQ approval (for new programs and modifications when necessary)

B. Mail to EPA (See Appendix I for address)

- Letter to EPA
- Copy of public notice of proposed action

C. Mail to Virginia Game and Inland Fisheries, U.S. Fish and Wildlife Service, National Marine Fisheries Service, Virginia Marine Resources, local Planning District Commission (PDC), and designated 208 Planning Agencies (See Appendix I for address)

- Letter to respective agency
- Copy of public notice of proposed action

D. Mail to Newspaper; After receipt of authorization to bill for public notice from permittee

- Letter to newspaper editor
- Copy of public notice of proposed action
- Public notice verification sheet

E. Email public notice to OWPP Mailing List Coordinator and DEQ Web Page Coordinator. Currently, these positions are held by Priscilla Royal and Bill Hayden.

F. Copy regional planning section on public notice.

2. For Program Approval (Modification); After 30 Day Comment Period

A. Mail to Permittee

- Letter approving program
- Approval memo

B. Mail to Newspaper

- Letter to newspaper editor
- Copy of notice of DEQ action
- Public notice verification sheet

LETTER TO POTW OF DEQ INTENT TO APPROVE

Date

Name

Title

Service Authority

Address

City

RE: Approval of Program Submittal/Modifications to the Pretreatment Program
Facility, Location, VA. VPDES Permit No. VA000XXX

Dear Mr. POTW:

Enclosed is a copy of the Public Notice detailing the Department of Environmental Quality's intention to approve the program submittal/modification to the Pretreatment Program in accordance with 9 VAC 25-31-810. In accordance with the State Law and the Permit Regulation, certain public notice requirements must be met before the actual (pretreatment program modification) (approval) can take place. The required public notice procedures are presented in the following paragraphs.

The owner must bear the cost of advertising the attached public notices. ***Both DEQ's intent to approve the program and the actual program approval, shall each be published one time in a newspaper of general local circulation. The notice of program approval will be published after the public comment period and when any public comments are resolved.*** Please complete and return ***both of*** the attached authorization forms with your signature which will permit the newspaper to bill the advertisement to you. If you have not submitted the authorization form within 14 days to allow the newspaper to bill you, approval of (modification of) the pretreatment program will be held in abeyance until the authorization form is received.

Following the first notice appearance in the newspaper, a minimum of 30 days will be allowed for public response. If no public response is received, or if the public response received can be satisfactorily answered, then the (modification to the) pretreatment program will be approved. However, if there is significant public response, then it may be necessary to initiate public hearing procedures. If a public hearing is necessary, you will be so advised. After the article has been published, you are responsible for seeing that the newspaper certification of publishing is received by the Department of Environmental Quality.

Addressee
VPDES Permit No.
Page 2

If you have any questions, please do not hesitate to contact me at (xxx) xxx-xxxx.

Sincerely,

Your Name
Environmental Engineer Senior

cc: Regional Office
EPA Region III (3WM55)

Enclosures: Public Notice Authorization Form
Public Notices (2)

AUTHORIZATION TO BILL APPLICANT FOR A PUBLIC NOTICE

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. Two separate public notices will be published, one time each in the: **[Newspaper name]**

Agent/Department to be billed:

Applicant's Address:

Agent's Telephone No:

Authorizing Agent:

Print Name

Authorizing Agent's
Signature

RETURN TO: DEPARTMENT OF ENVIRONMENTAL QUALITY
REGIONAL OFFICE
ADDRESS
CITY

PUBLIC NOTICE PROPOSED ACTION

Department of Environmental Quality
Regional Office
Address
City

Public Notice Date: _____

The following municipal authority has requested approval of (modifications to the) a Pretreatment Program:

POTW Name and Address
VPDES Permit No. VA00_____
Receiving Stream: _____
Procedures for final determination

The Department of Environmental Quality is issuing the following notice of proposed action under the Water Control Law and implementing regulations.

The permittee has requested approval of (modification to) the Publicly Owned Treatment Works (POTW) Pretreatment Program in accordance with requirements of 9 VAC 25-31-10 et. seq, Part VII (The modifications to the permittee's Pretreatment Program are ...).

The (program submittal) (modification) is available for review and copying at the Department of Environmental Quality office at _____. Further information may be obtained in writing to the above address or calling (name) at (phone #) or email at (address).

Persons wishing to submit comments or object to the Department of Environmental Quality's approval of the (program submittal) (listed modifications), or to request a public hearing pursuant to the Water Control Law should submit their comments or request in writing or email within 30 days to the above Department of Environmental Quality address.

Comments shall include the name, address and telephone number of the writer and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered by the Department. The Department may, upon request or upon its own motion, decide to hold a public hearing if it determines that public response is significant.

Following the 30 day comment period the Department will make its determinations regarding the POTW's request. (For modifications, include the following statement: Following the 30 day comment period the Department will approve the modification without further public notice if no substantive comments are received and the modification request is unchanged).

PUBLIC NOTICE OF DEQ ACTION

Department of Environmental Quality
Regional Office
Address
City

Public Notice Date: _____

The Pretreatment Program for the following municipal authority has been approved:

POTW Name and Address

VPDES Permit No. VA00_____

Receiving Stream: _____

DEQ's intent to approve this program was published in this newspaper on DATE. The public comment period for this action was DATE through DATE. No comments were received. OR All comments received during that period were answered and resolved. With this approval, the (POTW) will implement this program to control industrial waste discharged into the sanitary sewer system.

Any questions may be addressed to Pretreatment Coordinator at the above address or (xxx) xxx-xxxx.

LETTER TO EPA

Date

Mr. John Lovell
Branch Coordinator
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

RE: Facility Name
VPDES Permit No.
Pretreatment Program Approval or Modification

Dear Sir:

In accordance with the Virginia Permit Regulations, 9 VAC 25-31-10 et. seq., this is to advise that the Department intends to _____.

Attached, please find a copy of the _____.

This _____ consists of _____.

Any comment and/or objections regarding this pretreatment program shall be directed to the Department of Environmental Quality at the following address:

Department of Environmental Quality
Office of Water Permit Support
P.O. Box 10009
Richmond, VA 23240

In the event of failure to comment or object within 30 days of receipt of this notification (of approval/modification) of the referenced pretreatment program will be deemed acceptable to the Branch Coordinator.

Sincerely,

Your Name
Environmental Engineer Senior

cc: OWPS

Enclosure: Public Notice

LETTER TO FEDERAL/STATE AGENCIES (SEE APPENDIX I)

Date

Name

Agency

Address

City

RE: Facility Name
VPDES Permit No.
Pretreatment Program Approval or Modification

Dear Sir:

This is to transmit a copy of the above referenced public notice for intent to approve/modify a Pretreatment Program.

Any comments regarding the sufficiency of this proposal shall be addressed to the Department of Environmental Quality at the following address:

DEPARTMENT OF ENVIRONMENTAL QUALITY
REGIONAL OFFICE
ADDRESS
CITY

If no response is received within 14 days of receipt of this notification, it will be assumed that your Agency has no comments on the proposed Pretreatment Program approval.

Sincerely,

Your Name
Environmental Engineer Senior

Enclosure: Public Notice

TRANSMITTAL LETTER TO NEWSPAPER FOR PN

Date

Newspaper
Legal Advertising Department
Address
City, VA XXXXX

Dear News Editor:

Please publish the attached public notice in the earliest possible edition of your paper, *one time*.

Please publish it in the legal section in the smallest print possible, and add the first publication date to the public notice.

Attached, please find a copy of the permittee's authorization form, which certifies that the permittee will pay for the cost of the public notice. Upon completion of the advertising, please forward the bill for your services to: _____.

Also, as soon as possible after the second notice has been published, please send a statement certifying that the public notice has been published as requested above to the Department of Environmental Quality, _____.

The attached Public Notice Verification sheet may be used to provide the certification statement.

Sincerely,

Name
Environmental Engineer Senior

cc: EPA Region III (3WP24)
Regional Office
Central Office
Attachments

PUBLIC NOTICE VERIFICATION SHEET

PLEASE PASTE PRINTED COPY OF NOTICE IN THIS SPACE

I HEREBY CERTIFY THE NOTICE ATTACHED IN THE SPACE ABOVE APPEARED
IN THE _____ ON THE FOLLOWING DATE:

_____ 20__

_____ 20__

Signature

Title

_____ 20__
Date

ATTENTION: Pretreatment Engineer

LETTER TO POTW PROGRAM APPROVAL NOTIFICATION

Date

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Name
Title
Address
City

RE: Approval of (Modification to) the Approved Pretreatment Program for _____
VPDES Permit No(s). VA00_____

Dear Mr.

The Director has approved the (modifications to) Pretreatment Program submitted DATE. This approval is in accordance with 9 VAC 25-31-810.

If you have any questions, please do not hesitate to call YOUR NAME at (xxx) xxx-xxxx.

Sincerely,

Name
Regional Permit Manager

cc: EPA Region III
DEQ OWPS

APPROVAL MEMO

Department of Environmental Quality
Regional Office
Address
City

SUBJECT: APPROVAL OF (MODIFICATION TO) THE PRETREATMENT PROGRAM FOR
THE TOWN OF _____ PUBLICLY OWNED TREATMENT
WORKS (Permit No(s). VA 00)

TO: Regional Permit Manager

FROM: Regional Pretreatment Coordinator

DATE:

COPIES: OWPS

Legal Name of Owner:

Submitted By:

Date of Submittal:

Receiving Facility:

Receiving Stream: Basin:
Subbasin:
Section:
Class:
Special Standards:

Public Notice: The DEQ intent to approve this program (modification) was public noticed in the
_____ on _____ .

The program approval (modification) was public noticed in the _____ on _____ .

EPA Comments: By letter dated January 29, 1991, EPA has waived the right to review and comment
on pretreatment program approvals and modifications. In addition, by letter dated _____ EPA
was notified of DEQ's intent to approve/modify this program.

Planning Statement: _____

STAFF COMMENTS:

State Water Control Law and the Clean Water Act require Publicly Owned Treatment Works to
develop programs to meet the requirements of the State Permit Regulations and General Pretreatment
Regulations. This is necessary to regulate industrial pollutants introduced to their treatment works
which have the potential of causing plant upset, or pass-through, or sludge contamination.

The _____ STP has developed the above mentioned (program/modifications) to effectively
administer the program and control the industrial users into the system.

Brief description of reason for program development (or changes requiring program modification).
For example : During the industrial user survey, submitted on July 1, 2001, the Smith Town STP determined that two categorical industries (Carver Metal Plating & Warren Chemical) and one significant industrial user (Pfeifle Milling Co.) were discharging to their system. By letter dated July 23, 2001 this office required the STP to develop a pretreatment program.

STAFF RECOMMENDATIONS:

The staff recommends that the Director:

1. Approve the (modification to the) Pretreatment Program regulating industrial dischargers to the _____ treatment works.
2. Direct the staff to notify the permittee of this approval.

Approved: _____
Director

Date: _____

Note To Pretreatment Coordinator: In certain instances it may be possible and desirable to combine the public notice for approval or modification of a final pretreatment program with the notice for permit issuance, reissuance or modification. This combined public notice would save costs and time for both the Board and the permittee.

In order to accomplish this joint public notice, the standard Public Notice format in the VPDES permit manual has been revised. The following pages provide the additional language which must be utilized for this purpose. This wording has been reviewed and approved by the Attorney General's office, so it must be used as presented unless a variance is requested and granted. This change will be incorporated into the permit manual during the next revision.

PUBLIC NOTICE

ISSUANCE/REISSUANCE OF A VPDES PERMIT TO DISCHARGE TO STATE WATERS AND STATE
CERTIFICATION UNDER THE STATE WATER CONTROL LAW
[* AND PRETREATMENT PROGRAM APPROVAL (MODIFICATION)]

First Public Notice Issue Date: (To be Supplied by Newspaper)

The Department of Environmental Quality has under consideration issuance/reissuance of the following Permit and State Certificate:

Permit No.: VA
Name of Permittee: Owner's Name
Facility Name:
Facility Location:
Permittee Address:
Flow: 0.0 MGD
Receiving Stream: Receiving Water Name
Basin:
Subbasin:
Section:
Class:
Special Standards:

Discharge: Proposed/Existing Municipal/Industrial Discharge resulting from the operation of some kind of plant.

The proposed issuance/reissuance consists of: _____ limiting parameters listed in the permit.

This proposed issuance/reissuance is tentative.

*[Pretreatment Program Approval (Modification)]:

Pursuant to Section 9 VAC 25-31-830.E of the Permit Regulation, on (Date) the Department of Environmental Quality granted final approval (modification) of the pretreatment program for this facility and it is an enforceable part of the permit. In accordance with state regulations, all comments on the pretreatment program received during the 30 day public comment period, which ended on (Date), have been considered.

On the basis of preliminary review and application of lawful standards and regulations, the Department of Environmental Quality proposes to issue/reissue the permit subject to certain conditions.

*Add these parts when public notice includes final pretreatment program approval.

Persons may comment in writing to the Department of Environmental Quality Water Division on the proposed issuance/reissuance of the permit within 30 days from the date of the first notice. Comments shall include the name, address and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The Director of DEQ may, upon request or upon its own motion, decide to hold a public hearing if it determines that public response is significant.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting John Q. Writer at:

Department of Environmental Quality
Regional Office
Address
Telephone No. (000/000-0000)

Following the comment period, the Department will make its determinations regarding the proposed issuance/reissuance. These determinations will become effective, unless the Department grants a public hearing. Due notice of any public hearing will be given.

APPENDIX H – EPA Memorandum Regarding Nonsubstantial Program
Modifications

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107**

SUBJECT: Amendment to the General
Pretreatment Regulations

DATE: 7-21-97

FROM: EPA Region III

TO: POTW Pretreatment Program Managers

On July 17, 1997, EPA amended the General Pretreatment Regulations (62 FR 38405) to streamline the approval procedure for modification of approved POTW pretreatment programs. The amendment becomes effective on August 18, 1997. Among other things, the amendment reduces the number of program modifications that are considered substantial and therefore must go through the formal public notice and approval process, and reduces the "waiting period" that POTWs must allow for implementation of non-substantial modifications.

As a result of this action, the following modifications are no longer considered substantial:

- modifications that only add to the legal authority, or modifications that only directly reflect a revision to the General Pretreatment Regulations, 40 CFR 403.
- modifications to the local pH limitation, and modifications to industrial allocations which do not increase the Maximum Allowable Industrial Loadings for any pollutants.
- modifications to the POTW's method for implementing categorical standards.
- reductions in pretreatment resources.
- modification of the POTW's sludge disposal and management practices.

These program modifications can now be handled as non-substantial modifications.

For non-substantial modifications, the Approval Authority (EPA or the State) now has 45 days (reduced from 90 days) to approve or disapprove non-substantial modifications. If the non-

substantial modification is not disapproved within the 45 day time period, the POTW may begin implementation.

For further information, please consult the July 17, 1997 Federal Register. If you have any questions regarding this regulatory change, or other pretreatment matters, please call your State or EPA contact.

APPENDIX I – Mailing List

Each region must send a copy of the PN to the first five entries in this table (left column), their respective Planning District Commission, and their 208 planning agency.

1) Mr. Ray Fernald Game and Inland Fisheries 4010 West Broad Street Richmond, Virginia 23230	Executive Director Northern Virginia PDC 7535 Little River Turnpike, Suite 100 Annandale, Virginia 22003	Executive Director Southeastern Virginia PDC 723 Woodlake Drive Chesapeake, Virginia 23230
2) U.S. Fish and Wildlife Service Division of Ecological Services 1825-B Virginia Street Annapolis, Maryland 21401	Executive Director Rappahannock-Rapidan PDC 211 Waters Place Culpeper, Virginia 22701	Executive Director Peninsula PDC 2017 Cunningham Drive Hampton, Virginia 23666
3) National Marine Fisheries Service U.S. Department of Commerce Oxford Laboratory Railroad Avenue Oxford, Maryland 21654	Executive Director Thomas Jefferson PDC 513 East Market Street Charlottesville Virginia	Executive Director Accomack-Northampton PDC P.O. Box 417 Accomac, Virginia 23301
4) Virginia Marine Resources Commission 2401 West Avenue P.O. Box 756 Newport News, Virginia 23607	Executive Director Central Virginia PDC 2316 Atherholt Road P.O. Box 2526 Lynchburg, Virginia 24501	208 Agencies are as follows:
5) U. S. EPA, Region III Mr. John Lovell (3WM55) Branch Coordinator U.S. EPA Region III 1650 Arch Street Philadelphia, PA 19103-2029	Executive Director West Piedmont PDC One Sterling Avenue Martinsville, Virginia 24112	Chairman, Fifth Planning District Commission (address above)
Executive Director LENOWISCO PDC P.O. Box 366 Duffield, Virginia 24244	Executive Director Southside PDC 123 South Mecklenburg Avenue South Hill, Virginia 23970	Chairman Richmond-Crater Consortium P.O. Box 1808 2825 South Crater Road Petersburg, Virginia 22803
Executive Director Cumberland Plateau PDC P.O.Box 548 Lebanon, Virginia 24266	Executive Director Piedmont PDC 102 1/2 High Street Farmville, Virginia 23901	Chairman Hampton Roads Water Quality Agency 287 Pembroke Office Park Suite 131, Pembroke #3 Virginia Beach, Virginia 23462
Executive Director Mount Rodgers PDC 1021 Terrace Drive Marion, Virginia 24354	Executive Director Richmond Regional PDC 2201 West Broad Street Richmond, Virginia 23220	Chairman RADCO Planning District Commission (address above)
Executive Director New River Valley PDC Radford, Virginia 24143	Executive Director 208 Agency RADCO PDC P.O. Box 863 Fredericksburg, Virginia 22404	Chairman Southwest Virginia 208 Planning Agency P.O. Box 1469 Wise, Virginia 24293
Executive Director 208 Agency Fifth PDC 145 West Campbell Avenue Roanoke, Virginia 24010	Executive Director Northern Neck PDC P.O. Drawer H Callao, Virginia 22435	Chairman WASH-COG: Metro. Washington Council of Governments Subcommittee on Water Resources Planning: Attn: Jim Shell 777 North Capital Street, NE, Suite 300 Washington, D.C. 20002-4226
Executive Director Central Shenandoah PDC 633 North Coalter Street Staunton, Virginia 24401	Executive Director Middle Peninsula PDC P.O. Box 286 Saluda, Virginia 23149	First Tennessee-Virginia Development District 207 North Boone Street Johnson City, Tennessee 37601
Executive Director Lord Fairfax PDC 103 East Sixth Street Front Royal, Virginia 22630-4146	Executive Director Crater PDC 1964 Wakefield Street Petersburg, Virginia 23083	

DEPARTMENT OF ENVIRONMENTAL QUALITY MAILING LIST
APPROVED AND DEVELOPING PRETREATMENT PROGRAM

<u>POTW Name</u>	<u>Contact Person/ Phone Number</u>	<u>Mailing Address</u>
Alexandria Sanitation Authority	Cindy Galloway 703/549-3381	835 South Payne Street Alexandria, VA 22313-1987
Arlington County	Dennis Wisler 703/228-6881	3402 South Glebe Rd. Arlington, VA 22202
Altavista	Steve Bond 804/369-6284	P.O. Box 420 Altavista, VA 24517
Augusta County Authority	Service Jean E. Andrews 540/245-5670	P.O. Box 859 Verona, VA 24482-0859
Bedford	Marvin Booth 540/586-7191	852 Orange St. Bedford, VA 24523
Blacksburg-VPI Sanitation Authority	Michael E. Vaught 540/552-6940	P.O. Box 52 Blacksburg, VA 24063-0052
Caroline County	Allen T. Ramsay 804-633-4386	P.O. Box 424 Bowling Green, VA 22427
Chesterfield County	Abha Sharma 804/751-4406	P.O. Box 40 Chesterfield, VA 23832-0040
Culpeper	R. Clarke Wallcraft 540/825-8671	118 West Davis St. Culpeper, VA 22701
Danville	Clare T. Adams 804/799-5137	229 Northside Dr. Danville, VA 24540
Fairfax County	Paul M. Obst 703/550-9740 x 318	P. O. Box 268 Lorton, VA 22199
Fredericksburg	Wilbur E. Brown, Jr. 540/372-1077	P.O. Box 7447 Fredericksburg, VA 22404-7447
Frederick-Winchester Service Authority	Monica A. Whyte 540/667-0086	P.O. Box 43 3100 Berryville Pike Winchester, VA 22603
Galax	Orba Alderman 540/236-2422	P.O. Box 1187 Galax, VA 24333
Hampton Roads Sanitation District (HRSD)	Ronald E. Johnson 757/460-7040	1436 Air Rail Avenue Virginia Beach, VA 23455

<u>POTW Name</u>	<u>Contact Person/ Phone Number</u>	<u>Mailing Address</u>
Harrisonburg-Rockingham Regional Sewer Authority	Robert R. Hevener 540/434-1053	P.O. Box 8 856 North River Road Mt. Crawford, VA 22841
Henrico County	N. Wayne Burgess 804/795-9303	9101 WRVA Road Richmond, VA 23231
Henry County Public Service Authority	Jacquelyn F. Hodge 540/634-2504	P.O. Box 7 Collinsville, VA 24078
Hopewell Regional Wastewater Treatment Facility	Eugenia Grandstaff 804/541-2214	P.O. Box 969 231 Hummel Ross Road Hopewell, VA 23860
Lynchburg	Walter Younger 804/847-1634	2301 Concord Turnpike Lynchburg, VA 24504
Marion	Neal Burchett 540/782-8495	P.O. Box 1005 Marion, VA 24354
Martinsville	Karen Harrison 540/656-5176	801 Wind Dancer Lane Ridgeway, VA 24148
Pepper's Ferry Regional Wastewater Treatment Authority	Robert L. Graham 540/639-3947	P.O. Box 2950 Radford, VA 24143-2950
Rapidan Serv Auth	Tim Clemonts 804/985-7811	P. O. Box 148 Ruckersville, VA 22968
Richmond	Sherry H. Crewe 804/780-5320	1400 Brander St. Richmond, VA 23224
Rivanna Water and Sewer Authority	Stuart G. Wilson 804/977-2970 x 113	P.O. Box 18 Charlottesville, VA 22902-0018
Roanoke	Steven L. Walker 540/853-2406	1402 Bennington St., SE Roanoke, VA 24014-2697
South Boston	B. Carroll Anderson 804/575-4267	P.O. Box 417 South Boston, VA 24592
South Central Wastewater Authority	James W. Lewis 804/861-0111	900 Magazine Rd. Petersburg, VA 23803
Southampton County	Kenneth Arthur 757/653-3015	26022 Administration Ctr. Dr. Courtland, VA 23837

<u>POTW Name</u>	<u>Contact Person/ Phone Number</u>	<u>Mailing Address</u>
Spotsylvania County	Douglas Crooks 540/373-1992	10900 HCC Drive Fredericksburg, VA 22408
Stafford Co	Mike Smith 540/899-9619	P. O. Box 339 Stafford, VA 22555
Upper Occoquan	Evelyn Torres 703/830-2200	14631 Compton Rd Centreville, VA 20121
Waynesboro	Bill P. Hunt 540/942-6629	P.O. Box 1028 Waynesboro, VA 22980
Wytheville	Robert F. Anders 540/223-3422	P.O. Drawer 533 Wytheville, VA 24382-0533

PRETREATMENT APPROVAL TRACKING SHEET

POTW NAME: _____

COUNTY: _____

PERMIT NO: _____

	Date	Initial
Pretreatment Program Development		
Initiated by Board	_____	_____
Pretreatment Program Received	_____	_____
Additional Information Requested	_____	_____
Additional Information Received	_____	_____
Pretreatment Program to OWPS (Optional)	_____	_____
Comments Received for OWPS (Optional)	_____	_____
Pretreatment Program Considered Complete	_____	_____
Date Pretreatment Program Enacted	_____	_____
Copy RO Planning w/PN	_____	_____
Planning Statement Received	_____	_____
Pretreatment PN Letter to POTW (Proposed Action)	_____	_____
PN Authorization Received from POTW	_____	_____
PN Sent to Newspaper	_____	_____
PN Sent to EPA	_____	_____
PN Sent to 208 Planning Agency	_____	_____
PN Sent to VA Marine Resources Commission	_____	_____
PN Sent to VIMS	_____	_____
PN Sent to National Marine Fisheries Service	_____	_____
PN Sent to U.S. Fish & Wildlife Service Annapolis	_____	_____
PN Sent to U.S. Fish & Wildlife Service		
White Marsh	_____	_____
PN Sent to Game and Inland Fisheries	_____	_____
Verification from Newspaper	_____	_____
Public Notice Dates	_____	_____
Date Pretreatment Program Approved	_____	_____
To Owner (Certified) Original Letter/Memo	_____	_____
To OWPS and EPA - Copy of Letter/Memo	_____	_____
To RO Pretreatment File - Copy of Letter/Memo	_____	_____
Pretreatment PN Letter to POTW (Final Action)	_____	_____
PN Authorization Received from POTW	_____	_____
PN Sent to Newspaper	_____	_____
PN Date	_____	_____

PRETREATMENT MODIFICATION TRACKING SHEET

POTW NAME: _____

COUNTY: _____

PERMIT NO: _____

	Date	Initial
Pretreatment Program Modification Received	_____	_____
Additional Information Requested	_____	_____
Additional Information Received	_____	_____
Pretreatment Program to OWPS (Optional)	_____	_____
Comments Received for OWPS (Optional)	_____	_____
Pretreatment Program Considered Complete	_____	_____
Date Pretreatment Program Enacted	_____	_____
Copy RO Planning w/PN	_____	_____
Planning Statement Received	_____	_____
Pretreatment PN Letter to POTW (Proposed Action)	_____	_____
PN Authorization Received from POTW	_____	_____
PN Sent to Newspaper	_____	_____
PN Sent to EPA	_____	_____
PN Sent to 208 Planning Agency	_____	_____
PN Sent to VA Marine Resources Commission	_____	_____
PN Sent to VIMS	_____	_____
PN Sent to National Marine Fisheries Service	_____	_____
PN Sent to U.S. Fish & Wildlife Service Annapolis	_____	_____
PN Sent to U.S. Fish & Wildlife Service White Marsh	_____	_____
PN Sent to Game and Inland Fisheries	_____	_____
Verification from Newspaper	_____	_____
Public Notice Dates	_____	_____
Date Pretreatment Program Approved	_____	_____
To Owner (Certified) Original Letter/Memo	_____	_____
To OWPS and EPA - Copy of Letter/Memo	_____	_____
To RO Pretreatment File - Copy of Letter/Memo	_____	_____
Pretreatment PN Letter to POTW (Final Action)	_____	_____
PN Authorization Received from POTW	_____	_____
PN Sent to Newspaper	_____	_____
Verification from Newspaper	_____	_____
PN Date	_____	_____

APPENDIX J – EPA Letter of July 30, 1993 Addressing Multiple POTW
Programs



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107-4431

JUL 30 1993

Ms. LaVern H. Corkran
Environmental Engineer Consultant
Office of Water Resources Management
Virginia Department of Environmental Quality
4900 Cox Road
Innsbrook Corporate Center
Glen Allen, Va. 23060

Re: Pretreatment Implementation Requirements

Dear Ms. Corkran:

The General Pretreatment Regulations, 40 C.F.R. 403.8(a), requires "any POTW (or combination of POTWs operated by the same authority)" to develop a pretreatment program where certain conditions exist. Where a single authority operates two or more treatment plants, the pretreatment program must regulate all industrial discharges throughout the entire service area (i.e., all treatment plants). For this reason, one pretreatment program is approved rather than two or more separate programs.

Upon approval of the pretreatment program, the authority is required to implement the program for the entire service area. This requirement is imposed through the NPDES permit(s) of the POTW. Where the approved POTW has several treatment plants, some of which have industrial discharges and some of which do not, the requirement to implement the program is best included in all of the permits (including those with no industrial discharges). This will ensure that the POTW is required to maintain an adequate inventory of its industrial users as well as regulate any users that may connect in the future.

Where the State has determined that a complete pretreatment program is not required, I believe that the authority exists to require implementation of a limited program if necessary (although this may be dependent upon State law). In general, I believe that the State has the authority to impose conditions necessary to adequately control the discharges from the POTW. Where the POTW receives industrial discharges that have the potential to impact the treatment plant, this can include requirements for the POTW to control discharges into the POTW to ensure that problems with the effluent do not occur.

I hope this answers your questions. If you have any questions regarding these issues, please contact me at 215-597-6279.

Sincerely,

A handwritten signature in cursive script that reads "John Lovell". The signature is written in dark ink and is positioned above the printed name and title.

John Lovell
Pretreatment Coordinator

APPENDIX K – Industrial Waste Survey Form and Instructions

INSTRUCTIONS FOR DISCHARGER SURVEY FORM

General

1. This form is to be completed by industrial/commercial dischargers to Publicly Owned Treatment Works.
2. Complete all questions applicable to the discharge. Indicate NA for those questions not applicable.
3. If space provided on the form is not sufficient, attach sheet noting the question number and complete the answer.

Specific Title

The name and address of the facility, including the name of the owner and operator shall be submitted.

PART A - DISCHARGE INFORMATION

A-1 List all environmental permits held by or for the facility.

A-2 If yes, complete the remainder of the form and return to the Control Authority promptly. If no, complete questions A-3, A-4, A-5, A-6, B-1, and B-2 for identification purposes only and return to the Control Authority. A "No" answer would be applicable to dischargers with no wastewater discharge at all or discharging only sanitary waste.

PART B - ACTIVITY INFORMATION

B-1 Indicate the nature of the business conducted on the premises.

B-2 Standard industrial classification (SIC) numbers and descriptions may be found in the 1987 edition of the Standard Industrial Classification Manual prepared by the Executive Office of the President, Office of Management and Budget. This is available at most public libraries. The four-digit industrial SIC number shall be provided to identify the activity actually causing the discharge. (For each SIC number listed, the principal product or service shall be provided.)

B-3 Description of Operations. The user shall submit a brief description of the nature of the operations carried out by the surveyed facility. Include the date the facility was established on the present site.

Provide a separate narrative description of each specific activity or process producing a discharge to the municipal or public sewerage system or treatment works. Descriptions should be as concise as possible. Example: "Manufacture of sulfuric acid by contact process."

B-4 Provide in this space a brief narrative description of any pretreatment the wastewater receives prior to discharge. Include in this description those process changes, recycling methods, wastewater treatment equipment, and other techniques employed that result in waste abatement of this discharge.

B-5 Flow measurements shall show the measured average daily and maximum daily flow in gallons per day to the POTW from regulated process streams and from other streams as necessary to account for the sources of all wastewaters discharged to the sewer system.

PART C -Industrial Waste(s) and Other Waste(s) Discharged

C-1 List each wastestream discharged to the treatment works under the description column whether it is process water, cooling water, sanitary wastewater or a combination of these. For

process water discharges indicate the industrial process which results in the discharge (by SIC number or brief description).

For sanitary waste discharges only. Provide the information called for in Section C-2. However, Sections C-3, C-4, C-5 and C-6 need not be completed for discharges consisting only of sanitary wastewater.

C-2 Type of Discharge

- (a) For discharges originating from regulated processes, identify the pretreatment standards applicable to each.
- (b) A continuous discharge is one which occurs without interruption throughout the operating hours of the facility. An intermittent discharge is a discharge that occurs and ceases at regular or irregular intervals.
- (c) Discharge Points - Indicate for each wastestream discharged whether the wastestream is discharged into one of the following:
 - 1. Sanitary Wastewater Transport System - (A system of pipes conveying domestic wastewaters with storm and runoff waters excluded.)
 - 2. Combined Sanitary and Stormwater Transport System - (A system of pipes which carries a mixture of storm water runoff, surface water runoff, and other wastewaters such as domestic, commercial or industrial wastewaters.)
 - 3. Storm Water Transport System -(A separate collection system that conveys runoff from buildings, street surfaces and land resulting from precipitation.)
 - 4. Other - (Specify)
- (d) Discharge Occurrence - For each waste discharge indicate the days of the week the discharge(s) occurs. If the discharge(s) normally operate (either intermittently, or continuously) on less than a year-round basis, (excluding shutdowns for routine maintenance) name the months of the year discharge is operating. If discharge operates full year, indicate "12 months" next to appropriate waste discharge number(s).
- (e) Average Flows for Intermittent Discharge(s) and
- (f) Average Flows for Continuous Discharges(s) - When actual flow measurement data is available, provide data which best represents the average discharge rate. Also, provide the maximum discharge rate observed. In the absence of any flow measurements, estimates of the average discharge rate may be provided. Some methods of flow estimation would be: 1) water meter readings on incoming lines minus water losses through plant; 2) pumping rates if discharge must be pumped to the sewer; or 3) for batch operations, measurement of the change in the level of the batch reservoir with time.

Indicate where appropriate whether information for discharge rates is estimated or the result of actual measurement. Also, in the space provided on the form describe the methods used to obtain the discharge rate information. If a waste discharge number describes a combined significant discharger and sanitary discharge, then indicate next to the flow figures provided the percentage of that discharge which is attributed to the sanitary portion.

C-3 Presence and Results of metals and GC/MS Analysis of Table 1 Substances

C-4 Presence of Table 1 and Table 2 Substances

Analysis results must be presented for any Table 1 substance for which the discharger is regulated through a categorical or local pretreatment limit. Apart from this, presence or absence of a substance should be based on any previous analysis performed or based on knowledge of the constituents associated with the activities and/or processes causing the discharge (e.g., raw materials, catalysts, intermediates, etc.). For example, if zinc is used in a process from which there is a discharge, the waste discharge point number for that discharge would be written in the box next to zinc unless it is known that zinc is not present in the discharge. This claim should be based upon either actual analysis previously conducted or a mass balance established around that process in which zinc is used.

Any duplication in the listing of substances in the tables is due to the fact that they were previously published by others. Indication of the presence of one of these substances need not be repeated in multiple tables.

C-5 Presence of Table III Wastewater Characteristics

Same instructions as provided for Sections C-3 and C-4. Note that pH is indicated as present in all cases.

C-6 Sampling and Analysis

The discharger shall submit the results of sampling and analysis identifying the nature and concentration, or mass, of regulated pollutants in the discharge from each regulated process. Both daily maximum and average concentrations, or mass, where required shall be reported. The sample shall be representative of daily operations.

A minimum of four(4) grab samples must be used for pH, cyanide, total phenol, oil and grease, sulfide, and volatile organics. For all other pollutants, 24-hour composite samples must be obtained through flow- proportioned techniques where feasible. If not feasible, samples may be obtained through time-proportional composite sampling techniques or through a minimum of four (4) grab samples where the user demonstrates this will provide a representative sample of the effluent. A minimum of one (1) representative sample is required.

Samples shall be taken immediately downstream from pretreatment facilities if such exist or immediately downstream from the regulated process if no pretreatment exists. If other wastewaters are mixed with regulated waste-waters prior to pretreatment, the user should measure the flows and concentrations necessary to allow use of the combined wastestream formula in order to evaluate compliance with the pretreatment standards. When an alternate concentration or mass limit has been calculated in accordance with the combined wastestream formula, this adjusted limit along with supporting data shall be submitted to the Control Authority.

Sampling and analysis procedures shall be performed in accordance with the techniques prescribed in 40 CFR 136 (1991). When 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or when the Director determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed by using validated analytical methods or any other applicable sampling and analytical procedures, including procedures suggested by the POTW or other parties, approved by the EPA.

DISCHARGER SURVEY FORM

SURVEY OF DISCHARGES TO THE PUBLICLY OWNED PRETREATMENT WORKS (POTW)

NOTE: Refer to attached instructions when answering questions below.

TITLE:

A. Discharge Information

A-1 Permits held _____

A-2 Does this establishment discharge industrial waste (1) or other waste(s); (2) to the POTW? Please check below:

Yes _____ No _____

A-3 Name of facility discharging wastes to the POTW: _____

Name of owner of the facility _____

Name of operator of the facility _____

A-4 Address of the facility _____

Address of the Owner _____

Address of the Operator _____

A-5 Telephone number of facility _____

Telephone number of owner _____

Telephone number of operator _____

A-6 Name and telephone number of person completing this form:

(1) "Industrial Waste" means liquid or other wastes resulting from any process of industry, manufacture, trade or business, or from the development of any natural resources.

(2) "Other waste" means decayed wood, sawdust, shavings, bark, lime, garbage, refuse, ashes, offals, tar, oil, chemicals, and all other substances, except industrial waste and sewage, which may cause pollution in any waters.

B. Activity Information

B-1 Type of industry, manufacture, trade or business:

B-2 Standard Industrial Classification Code, (available from Standard Industrial Classification Manual), principal product or service and average rate of production.

SIC Code

Provide Four-Digit
Industrial Code

Product or
Service
Provided

Average Rate of
Production
(Monthly-Weekly-Daily)

_____	_____	_____
_____	_____	_____
_____	_____	_____

B-3 General description of industrial/trade activities and/or plant processes on the premises: Include the date established on site.

B-4 Describe any waste handling and/or pretreatment facilities:

B-5 Flow measurements of each discharge:

SIC Code	Activity	Average	Daily Flow (Gallons/Day)
			Maximum
<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>

C. Industrial Waste(s) and Other Waste(s) Discharged

C-1

Industrial Processes	Description	Waste Discharge Number
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>

C-2

a.	Regulated Process	Categorical Pretreatment Standard
	<hr/>	<hr/>
	<hr/>	<hr/>
	<hr/>	<hr/>

b. Type of Discharge ____Continuous ____Intermittent

c. Discharge Point Description

SIC Code	Discharge Points (Describe Receiving Systems)
<hr/>	<hr/>
<hr/>	<hr/>

d. Discharge Occurrence

SIC Code	Days Per Week (Circle)	Months
<hr/>	S M T W T F S	<hr/>
<hr/>	S M T W T F S	<hr/>
<hr/>	S M T W T F S	<hr/>

e. Average flows for Intermittent Discharges

Waste Discharge Number	FREQUENCY (Avg No. of Discharge Occurrences Per Day)	DURATION (Avg No. of Hrs Per Day Discharge is Operating)	DISCHARGE QUANTITY (Avg Volume Per Day Discharged-Gal)	Estimate(E) or Measurement(M)

f. Average flows for Continuous Discharges

Waste Discharge Number	DURATION (Average number of hours per day the discharge is operating)	Average Daily Flow (GPD)	Maximum Daily Flow (GPD)	Estimate (E) or Measurement(M)

Describe the methods used for flow measurement and/or flow estimation in C-2.(e) and C-2.(f) above:

C-3 Presence of Toxic Substances - TABLE 1

Indicate by waste discharge number(s) beside each substance if it is present in the discharge(s) to the sewerage system or treatment works.

Parameter	ug/l	Parameter	ug/l	Parameter	ug/l
Acenaphthene		Acenaphthylene		Acrolein	
Acrylonitrile		Aldrin		Alpha-endosulfan	
Alpha-BHC		Aluminum, total		Anthracene	
Antimony, total		Arsenic, total		Asbestos	
Barium		Benzene		Beta-endosulfan	
Benzidine		Benzo(a) anthracene		Benzo(b) pyrene	
3,5-benzoflouranthene		Benzo(ghi) perylene		Benzo(k) flouranthene	
Beryllium, total		M-Cresol			
Bis(2-chloroethyl) ether		Beta - BHC		Bis(2-chloroethoxy) methane	
Boron		Bis(2-chloroisopropyl) ether		Bis(2-ethylhexyl) phthalate	
4-bromophenyl phenyl ether		Bromide		Bromoform	
Carbon tetrachloride		Butylbenzyl phthalate		Cadmium	
Chlorobenzene		Chlordane		Chlorine, total residual	
2-Chloronaphthalene		Chlorodibromomethane		Chloroethane	
4-Chlorophenyl phenyl ether		2-Chlorophenol		p-Chloro-m-cresol	
		2-Chloroethyl vinyl ether		Chloroform	

Chromium, total		Chrysene		Cobalt, total	
Color		Copper, total			
1,3 - Cis-dichloropropylene		Cyanide, total		Dibenzo(a,b) anthracene	
Delta - BHC		4,4 - DDT		4,4 - DDE	
4,4 - DDD		Dieldrin		1,2- Dichlorobenzene	
1,3 - Dichlorobenzene		1,4 - Dichlorobenzene		3,3 - Dichlorobenzidine	
Dichlorobromomethane		1,1 - Dichloroethane		1,2 - Dichloroethane	
1,1 - Dichloroethylene		2,4 - Dichlorophenol,2 -		Dichloropropane	
1,2 - Dichloropropylene		Diethyl Phthalate		Dimethyl Phthalate	
2,4 - Dimethylphenol Di-N-butyl phthalate		Di-N-butyl Phthalate		2,4 - Dinitrotoluene	
2,6 - Dinitrotoluene		Di-N-octyl phthalate		1,2 - Diphenylhydrazine	
Endosulfan sulfate		Endrin		Endrin aldehyde	
Ethylbenzene		Fecal coliform		Fluoranthene	
Fluorine		Fluoride		Gamma - BHC	
Heptachlor		Heptachlor epoxide		Hexachlorobenzene	
Hexachlorobutadiene		Hexachlorocyclopentadiene		Hexachloroethane	
Indeno (1,2,3 - cd) pyrene		Isophorone		Iron, total	
Lead, total		Manganese, total		Magnesium, total	
Mercury, total		Methyl Bromide		Methyl chloride	
Methylene chloride					
Molybdenum, total		Naphthalene		Nitrobenzene	
N-nitrosodimethylamine		N-nitrosodi-N-propylamine		N-nitrosodiphenylamine	
Nickel, total		Nitrate - Nitrite		Nitrogen, total organic	
2 - Nitrophenol		4 - nitrophenol		Oil and Grease	
PCB - 1016		PCB - 1221		PCB - 1232	
PCB - 1242		PCB - 1248		PCB - 1254	
PCB - 1260		Pentachlorophenol		Phenol	
Phenols, total		Phenanthrene		Phosphorus, total	
Pyrene		Radioactivity		Selenium, total	
Silver, total		Sulfate		Sulfide	
Sulfite		Surfactants		1,1,2,2,-Tetrachloroethane	
Thallium, total		Tin		Titanium, total	
Toluene		Toxaphene		1,2,4 - trichlorobenzene	
Toluene		1,2 - trans-dichloroethylene		1,2 - trans-dichloropropylene	
1,1,1, - trichloroethane		1,1,2 - trichloroethane		Trichloroethylene	
trichlorophenol		Vinyl chloride		2,4,6 -	
				Zinc, total	

C-4 Presence of Table 2 Substances (Hazardous)

Indicate by circling name whether substance is present in the discharge(s) to sewerage systems or treatment works. Also indicate waste discharge number beside circled substances.

Acetaldehyde		Allyl alcohol		Allyl chloride	
Amyl acetate		Aniline		Benzonitrile	
Benzyl chloride		Butyl acetate		Butylamine	
Captan		Carbaryl		Carbofuran	
Carbon disulfide		Chlorpyrifos		Coumaphos	
Cresol		Crotonaldehyde		Cyclohexane	
2,4-D (2,4-		Diazinon		Dicamba	

Dichlorophenoxy acetic acid)					
Dichlobenil		Dichlone		2,2-Dichloropropionic Acid	
Dichlorvos		Diethylamine		Dimethylamine	
Dinitrobenzene		Diquat		Disulfoton	
Diuron		Epichlorohydrin		Ethanolamine	
Ethion		Ethylenediamine		Ethlyenedibromide	
Formaldehyde		Furfural		Guthion	
Isoprene		Isopropanolamine dodecylbenzenesulfanate		Kelthane	
Kepone		Malathion		Mercaptodimethur	
Methoxychlor		Methylmercaptan		Methylmethacrylate	
Methylparathion		Mevinphos		Mexacarbate	
Monoethylamine		Monomethylamine		Naled	
Napthenic acid		Nitrotoluene		Parathion	
Phenolsulfanate		Phosgene		Propargite	
Propylene oxide		Pyrethrins		Quinoline	
Resorcinol		Strontium		Strychnine	
Styrene		2,4,5-T (2,4,5-Trichlorophenoxy acetic acid)		TDE (Tetrachlorodiphenylethane)	
2,4,5-TP [2-(2,4,5 Trichlorophenoxy)(propionic acid)]		Trichlorofan		Triethylamine	
Trimethylamine		Uranium		VanadiumXylene	
Xylenol		Zirconium		Other *	

*Material listed in 40 CFR Part 116 (Designation of Hazardous Substances) known to be present.

C-5 Wastewater Presence of Table III Characteristics

Indicate by waste discharge number in the box beside each parameter whether it is present in the discharge(s) to sewerage systems or treatment works.

Parameter	mg/l	Parameter	Mg/l	Parameter	mg/l
1. Algicides*		2. Ammonia		3. Biochemical Oxygen Demand (BOD 5)	
4. Calcium		5. Chemical Oxygen Demand (COD)		6. Chloride	
7. Dyes (organic)*		8. Dyes (inorganic)*		9. Flammable liquids	
10. High temperature (80 degrees F)		11. Organic Nitrogen		12. pH (standard units)	
13. Potassium		14. Sodium		15. Total Suspended Solids	
16. Turbidity (Jackson Units)		17. Others**			

*Specify substance or compound, in space provided below, where possible trade names should be accompanied by a listing of chemical constituents.

**Other waste substances _____

C-6 Sampling and Analysis

[illegible]

APPENDIX L –Review of Local Limits Development

1. Requirements

POTWs are required to establish local limits to implement the general prohibitions against pass-through, interference and sludge contamination. To prevent site-specific problems, each POTW must assess all of its significant industrial users and employ sound technical procedures to develop defensible local limits to ensure protection of personnel, the environment, and the POTW. For each pollutant of concern, the POTW must determine the maximum loading which can be accepted by the treatment facility without interference, pass-through, or sludge contamination. Allocation of available industrial loading can be accomplished in a number of ways. The control option lies with the POTW so long as the implementation and enforcement of local limits is maintained.

2. Site Specific Parameters Considered

Domestic Flow - The average daily domestic and commercial flow.

Industrial Flow - Total daily flow received from significant industrial users. (Do not include commercial flow)

Industrial Sampling Data - Any historical operating data indicating total industrial input to the POTW.

Land Application Criteria - Disposal site loading limitations; Soil cation exchange capacity; Acreage of disposal site; Site use duration in years.

POTW Effluent Hardness - Use average effluent hardness in a mass balance with average stream hardness, where effluent characteristics of flow and hardness significantly impact hardness instream at critical flows.

POTW Flow - The design and the average daily dry weather flows.

POTW Operating Data - Any historical operating data indicating actual removal efficiencies and inhibition levels.

Receiving Stream Flow - 7Q10 or tidal dilution factor. 1Q10 or corresponding dilution.

Sludge Flow - Daily sludge flow to ultimate disposal, and for the case of anaerobic digestion; the total sludge flow to digestion.

Sludge Solids - The percent sludge solids to disposal.

Stream Hardness - Average water hardness of the receiving stream, or a mix of the hardness values of the effluent and receiving stream..

3. Local Limits Evaluation/Reevaluation Process

- a. The VPDES permits for pretreatment POTWs require local limits evaluation and periodic reevaluation. The pollutants potentially of concern to all POTWs are silver, copper, chromium, cadmium, nickel, lead, zinc, arsenic, mercury, and cyanide. Screening criteria for limits development are given on pages 2-22 and 2-23 of EPA's Guidance Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program.

If a particular pollutant meets any of these criteria, then the POTW should conduct a headworks loading analysis. Local limits should be developed for the parameters meeting the criteria referenced above.

- b. If a headworks loading analysis is required, it should be performed by EPA methodology as contained in the PRELIM program or the December 1987 Guidance Manual on the Development and Implementation of Local Discharge Limitations Under the Pretreatment Program. The POTW should have representative industrial sampling data for the pollutant parameters of concern. It is recommended that the POTWs have the following site-specific monitoring data as a minimum.
- 24-hour flow-proportioned composite samples of POTW influent and effluent for five consecutive days (average POTW flow during each 24-hour period should be recorded). Influent samples should be taken prior to return of recycle streams.
 - 24-hour flow-proportioned composite samples of primary effluent for five consecutive days (performed concurrently with influent and effluent sampling).
 - 24-hour flow-proportioned composite samples for five consecutive days from an interceptor or trunk line receiving only domestic/commercial wastewater.
 - Grab samples must be used to evaluate cyanide, phenols, and volatile organics. At least 4 grabs should be taken across each of the days of POTW sampling at each station. Each day's grabs can be composited in the laboratory.
 - All metals analyses should be by graphite furnace or other methodology equally sensitive. Cold vapor AA should be used for mercury. It is recommended that a surrogate value of 1/2 the detection limit be used in calculations involving results reported below detection.

4. General Considerations in Establishing Local Limits

As stated above, local limits are directed at correcting or preventing problems at the POTW and must address three concerns: pass-through, interference and sludge contamination. Consequently, each toxic pollutant should be considered separately since each pollutant can have a different impact on the treatment system.

Prevention of pass-through of toxics should be controlled based on daily maximum local limits which are designed to meet Virginia's Water Quality Standards at the respective stream flows at which the standards apply. This will generally involve the application of the chronic standards at 7Q10 stream flows and the acute standards at 1Q10 flows. The full 7Q10 and 1Q10 flows should be utilized, since the local limits development process is a conservative steady-state methodology. Use background (ambient) stream concentrations from STORET if clean sampling data are available. Experience to date indicates that the local limits methodology proactively functions to allow POTWs to pass pollutant screenings for VPDES effluent metals limits, while yielding achievable local limits. (The VPDES permit writer should be consulted for any draft metals limits or any tidal mixing zones.) This approach follows EPA's latest software for local limits development.

In the process of developing local limits, it may become apparent that a POTW's domestic loadings of copper, lead or zinc may equal or exceed the allowable headworks loadings for these metals. All of these are constituents of residential plumbing or plumbing solder, and can be leached at significant concentrations if the municipal water supply is soft and

aggressive. (Trace amounts of most metals will also be present in the intake water for the municipal system.) Local limits in such cases should then be based on the domestic background, as characterized by at least five site-specific samples. Each parameter limit should be set at the average plus one standard deviation of its domestic samples. Such a limit should prevent an industry from being in significant non-compliance solely on the basis of its tap water.

For additional details, please refer to “Region III Guidance for Setting Local Limits for a Pollutant Where the Domestic Loading Exceeds the Maximum Allowable Headworks Loading”. This document, as well as other local limits guidance can be found at the following website:

http://cfpub1.epa.gov/npdes/docs.cfm?document_type_id=1&view=Policy%20and%20Guidance%20Documents&program_id=3&sort=name .

It should also be noted that amendments to the Safe Drinking Water Act requires municipalities to institute corrosion control methods for copper and lead, which should reduce domestic metals concentrations. One of the most cost-effective corrosion inhibitors for smaller systems is zinc orthophosphate. Therefore, we need to ensure that local limits for zinc, particularly in regard to biological inhibition at the POTW, are as realistic as possible.

Sludge analyses are available from the POTWs and should also be in the regional office files in the event of land application. All POTWs in Virginia which landfill their sludge or the ash resulting from incineration must certify that the sludge or ash is not hazardous. The Toxicity Characteristic Leaching Procedure (TCLP) is used for making this determination. The sludge or ash leachate is tested for eight metals, six herbicides and pesticides, and 24 additional organics limited by the Federal Safe Drinking Water Act. Cyanide in excess of 250 mg/kg on a dry weight basis is also considered hazardous. Sludge metals concentration requirements for land application and incineration are contained in 40 CFR Part 503, promulgated February 19, 1993. The land application requirements for molybdenum were revised in an amendment to the rule on February 25, 1994. This revision retains only the maximum ceiling concentration for molybdenum. All other metals are governed by ceiling concentrations and maximum annual and cumulative loading rates for land application. Those POTWs composting sludge for distribution and marketing must meet the concentration limits of Table 3, (503.13). These Table 3 limits also provide good sludge criteria for other POTWs with land application. Application of such a sludge is generally limited only by the agronomic rate and is suitable for distribution and marketing, in regard to metals.

5. Local limits Development Methodology

The development of local discharge limits involves two major steps: (1) the establishment of maximum allowable headworks loading (MAHL) to the treatment plant; and (2) the allocation of the maximum allowable load among all existing and future IUs. Below is a brief overview of a general procedure for determining MAHLs to the plant:

- a. Determine the influent mass loading (multiply pollutant concentration and average POTW influent flow rate by an appropriate conversion factor)
- b. Determine the mass balance of each unit process including sludge handling processes (follow the route of the pollutant through the treatment process)
- c. Determine percent removal of the pollutant at each unit process and the cumulative removal efficiencies at all treatment steps combined
- d. Establish the pollutant's critical or threshold concentration acceptable to each unit process, the receiving stream, and sludge disposal

- e. Back calculate the maximum acceptable influent concentration in relation to each unit process, using the in-plant back calculating formula described below:

$$L_p = L_i / 1 - E_p$$

where L_p = desired influent concentration
 L_i = criteria concentration at unit operation
 E_p = reduction in upstream process

- f. Select the lowest limiting concentration as the acceptable maximum influent concentration

- g. Calculate the maximum allowable mass loading, using the mass conversion formula:

$$L = Q \times C \times 8.34$$

where L = mass loading in lbs/day
 Q = wastewater flow MGD
 C = concentration in mg/l
8.34 = conversion factor
 $\frac{\text{lbs/day}}{\text{mg/l} \times \text{MGD}}$

Once the MAHL has been established, the domestic loading and an appropriate safety factor loading/reserve are subtracted. The POTW may then allocate the resulting maximum allowable industrial loading (MAIL) to its significant industrial users according to the following methods: uniform concentration, industrial contributory, mass proportion, or selected industrial reduction.

Most POTWs adopt local limits as needed based on evaluation of toxic metals and cyanide. However, the toxic organic compounds might also need to be controlled. Many non-categorical industries utilize toxic chemicals, e.g. food additives, and therefore, the testing should not be limited to POTWs which receive categorical industrial waste. When there are questions, requirements for chemical-specific testing should be implemented on influent, effluent and sludge. Where the tests indicate greater need for control, the source of the toxic discharge should be determined and local limits modified. Local limits should also address conventional pollutants to prevent plant upset and permit violations. Industries should meet local limits as soon as possible but no later than 3 years after limits are set. If more than 1 year is required to meet the developed limits, then interim limits should be established.

6. PRELIM

- a. Background. Development of local limits, and allocation of allowable loadings to significant dischargers, can involve a time consuming set of calculations. Consequently EPA has developed a computer program titled PRELIM (Pretreatment Limitations Model) to derive technically based local limits. The latest version of the program, PRELIM v5.0, and a User's Guide can be downloaded from the following website:

http://cfpub1.epa.gov/npdes/docs.cfm?document_type_id=1&view=Policy%20and%20Guidance%20Documents&program_id=3&sort=name .

In addition to performing required calculations, the program will input default data whenever requisite data for program input are unavailable. This program can also be useful to POTWs required to develop or reevaluate local limits or to the state for the review of local limits.

- b. Program Objective. The computer program is broken into two basic modules. The first module calculates in-plant criteria that form the basis for setting local limits. These include effluent (pass through) or water quality restrictions, sludge or land application criteria, POTW inhibition or interference values (literature values are automatically supplied if POTW specific data are not available), and design data. Each criterion is back calculated to the POTW treatment plant influent, taking into account POTW removal rates. The most stringent criterion for each pollutant is displayed.

The second module allocates the allowable industrial loading to the SIUs by one of three methods. Safety and expansion factors for each pollutant can be selected for inclusion in all calculations.

- c. Program Methodology. Equations and user options available are contained in the users guide.
- d. Information Required. Part of PRELIM's versatility is that it will utilize all locally developed data, but can supply default data when certain site-specific data are not available. Among the major default data files available are:
- Concentrations of 16 selected priority pollutants in domestic and commercial sewage;
 - POTW removal rates for 16 selected priority pollutants;
 - Federal land application criteria; and
 - Inhibition data for 16 selected pollutants in activated sludge, anaerobic digestion, and nitrification treatment systems.

The above data are compiled from various literature data sources. The information that a POTW needs for optimum utility of PRELIM is accurate data.

- e. PRELIM Limitations. PRELIM is intended to provide a technically based methodology for development of local limits while simplifying the extensive calculation involved. However, PRELIM is not expected to replace sound judgement where input or output interpretation is needed. Users of the program should be familiar with the procedures and methodologies used by PRELIM.
- f. PRELIM v5.0. EPA released the 5.0 version of PRELIM with a user's guide and supplemental manual dated June 1996. This version offers a number of refinements and upgrades over its predecessor. The user's guide should be consulted for instructions on installing PRELIM 5.0. Default removal rates are included for primary treatment, activated sludge, trickling filter/RBCs, and across nitrification. The default removals for activated sludge and trickling filter are similar to site-specific removals determined at POTWs in Virginia; however, site-specific data should always be used when available. The program still allows the entry of manually calculated process removal rates in its Standards and Criteria section. Default removals can be indicated by using the F10 key. It is recommended that POTWs determine mean removal rates on a mass basis, and enter them at this point in the program. PRELIM 5.0 can also utilize influent/effluent data and calculate mean removals, average daily removals and decile removal efficiencies, the latter provided nine data points are available; calculated values can be accessed by using the F8 key. Please note that this PRELIM version assumes nitrification takes place as a tertiary step, requiring possible adjustments as outlined later in this appendix.

There is another characteristic of Version 5.0 that is important to note. If inhibition thresholds are not available for a secondary treatment process, the program will default and set the allowable inhibition loading at the current influent loading. This can be overly conservative for POTWs with trickling filters or RBCs, for which

PRELIM has no default inhibition thresholds. These fixed film processes are very tolerant in regard to inhibition, as can be seen from Table 2-1 of EPA's Guidance Manual for Preventing Interference at POTWs, September 1987. POTWs can enter inhibition thresholds from this source into PRELIM as one way of dealing with the problem noted above. Another is to ignore PRELIM's inhibition loadings in such a case, and manually calculate local limits using the sludge and pass-through loadings calculated by the program.

7. Example Manual Calculation of a Uniform Concentration Local Limit for Copper
(This calculation was performed before the adoption of Virginia's Water Quality Standards for toxics. Acute standards at mix with 1Q10 flow would also have to be considered.)

POTW Information:

- Design flow is 4 MGD
- Average flow is 2.68 MGD
- Primary and secondary clarification
- Secondary treatment by trickling filters
- Nitrification by RBCs following trickling filters
- Anaerobic digestion of sludge
- Sludge flow to digestors is 0.01 MGD
- Ultimate disposal of sludge by landfilling
- Average total flow of industries discharging Cu is 0.213 MGD
- Average domestic/commercial flow is 2.467 MGD
- Background concentration of Cu in domestic/commercial wastewater is 0.05 mg/l

NOTE: POTW inhibition thresholds and removal rates will be literature/PRELIM default values, safety/expansion factor selected by POTW is 25 percent.

Receiving Stream Information:

7Q10 flow at POTW location is 23.4 MGD

Average water hardness upstream of POTW is 130 mg/l

Chronic VWCB freshwater criterion for Cu is:

$$e^{0.8545} (\ln(\text{hardness})) - 1.465 \text{ ug/l} = e^{0.8545} (\ln(130)) - 1.465 \text{ ug/l} = 14.8 \text{ ug/l}$$

(Needs to be evaluated as total recoverable. Translator ratios can be used if available from VPDES work).

Headworks Loadings (Concentration) Limit to Prevent Pass-Through:

Dilution factor of average POTW flow and receiving stream 7Q10 flow:

$$\text{dilution factor} = \frac{23.4 \text{ MGD} + 2.7 \text{ MGD}}{2.7 \text{ MGD}} = 9.66$$

The concentration upstream of the POTW is assumed to be zero, due to lack of dissolved metals data.

$$\text{Allowable concentration in POTW effluent} = (9.66)(14.8 \text{ ug/l}) = 142.9 \text{ ug/l}$$

PRELIM default value for removal of Cu by secondary treatment is 82 percent.

$$\text{Headworks limit} = \frac{142.9 \text{ ug/l}}{(1-0.82)} = 793.8 \text{ ug/l}$$

Headworks Loading (Concentration) Limit to Prevent Biological Inhibition:

Trickling filters and rotating biological contactors are aerobic fixed film treatment processes, which are generally less vulnerable to inhibition than activated sludge. The September 1987

EPA Guidance Manual for Preventing Interference at POTWs, indicates an inhibition threshold for aerobic fixed film processes of 25 to 50 mg/l for copper. Therefore, the limiting factor for inhibition will be either nitrification or anaerobic digestion.

Nitrification: PRELIM inhibition threshold = 0.05 mg/l = 50 ug/l

Headworks limit = $\frac{50 \text{ ug/l}}{(1-0.82)} = 277.7 \text{ ug/l}$

(Incorporates removal through secondary treatment, since most nitrification processes are preceded by at least some stage of secondary treatment).

Anaerobic Digestion: The sludge flow to the digester includes all of the copper removed by the POTW concentrated by a factor of 270. (2.7 MGD/0.01 MGD, where 2.7 MGD is POTW influent flow and 0.01 MGD is digester influent flow).

PRELIM inhibition threshold for anaerobic digestion is 40 mg/l = 40,000 ug/l
 $\frac{40,000 \text{ ug/l}}{(270)(0.82)} = 180.6 \text{ ug/l}$

Sludge Disposal

Landfill disposal of POTW sludge is currently governed only by the TCLP Test. Copper is not one of the limited parameters and consequently a local limit for copper would not currently be impacted by landfill disposal.

Allowable Headworks Loading (Concentration) Limit

The most stringent headworks loading limit is that for anaerobic digestion. Utilizing the safety/expansion factor in the following expression yields the allowable headworks influent concentration: $(180.6 \text{ ug/l})(1-0.25) = 135.4 \text{ ug/l}$

Calculation of Uniform Concentration Local Limit:

$\frac{(2.7 \text{ MGD}-0.213 \text{ MGD})}{0.213 \text{ MGD}}(135.4 \text{ ug/l-domestic Cu conc.})+135.4 \text{ ug/l} = 1132 \text{ ug/l} = 1.13 \text{ mg/l}$

where: 0.213 MGD is total industrial flow discharging copper

8. Additional Considerations in Local Limits Development and Running PRELIM

- a. Evaluation of the Nitrification Process by PRELIM. The user must keep in mind that PRELIM's calculation methodology assumes that nitrification is a tertiary treatment process. The program must be adjusted for the case of a POTW which nitrifies with its secondary treatment process. This is a likely case if the POTW has only a seasonal nitrification requirement. This adjustment can most easily be accomplished by comparing the activated sludge and nitrification threshold values for a given pollutant, and placing the most stringent of the two in PRELIM's column of inhibition thresholds for activated sludge. The POTW may receive a higher influent concentration of a given pollutant than would be allowed using the previous procedure, but still meets the nitrification requirements in its VPDES permit. In this case, the influent concentration of the particular pollutant may be used as the inhibition threshold for activated sludge, after it has been adjusted to account for any removal through primary clarification. Also, data from site specific inhibition studies may be used in PRELIM where acceptable laboratory procedures are followed.

- b. Sludge Criteria for Land Application and Composting. It is recommended that POTWs disposing of their sludge by these methods, utilize the sludge criteria for metals listed in Table 3 of Part 503.13. Application of sludge meeting these criteria would be unrestricted up to the agronomic rate for infrequent applications.
- c. Evaluation of Local Limits Achievability. There are a number of EPA guidance manuals which contain data on the treatability of toxic pollutants. Such information is listed in Appendix L of EPA's December 1987 Guidance Manual on the Development and Implementation of Local Discharge Limitations Under the Pretreatment Program. Data can also be found on BAT level metals treatment in EPA's February 1984 Guidance Manual for Electroplating and Metal Finishing Pretreatment Standards. Long term concentration averages listed in Table 3.4 of the latter EPA manual are more appropriate to evaluate local limits achievability. This is because the metal finishing categorical limitations were economically evaluated for the 99th percentile of expected variations from long-term averages. If a metal finisher installed treatment at least equivalent to the BAT level, operates it properly and self-monitors at the frequency of 10 samples per month; the discharger should remain in compliance with the categorical limits 99 percent of the time. Therefore, a long-term average effluent concentration considerably lower than the categorical limitations can be achieved, with the discharger still not falling within EPA's definition of significant noncompliance, a criterion for which is set at 66 percent exceedance of the same daily maximum limit. It must also be remembered that local limits are developed for site-specific protection of a POTW and its receiving stream. Thus, users at some POTWs will be legitimately required to achieve better treatment than can be delivered by BAT level technology. Advanced technologies such as ion exchange, ultrafiltration or reverse osmosis may be required. Vendor brochures for ultrafiltration equipment cite effluent metals concentrations of 0.1 mg/l for most metals, with even lower levels achievable for mercury, cadmium, arsenic and lead. Other avenues for pollutant removal may be product substitution or recycling. There are several examples of such removal or substitution approaches which have been taken in Virginia. In a number of cases, zinc-based compounds, which are commonly used as biocides in cooling towers, have been successfully replaced with other chemicals. In another situation, a textile mill discovered that the zinc oxide coating on the yarn it received was not necessary and had no affect on product quality, hence, affording the potential to remove this pollutant at its source.
- d. Development of Local Limits for Toxic Organic Compounds. Primary POTW concerns with these compounds will lie with volatile organics and their potential for causing fire, explosion and fume toxicity in the collection system or at the headworks of the plant. The water quality standards adopted for organics are so high, with exceptions of pesticides, PCBs and dioxins; that pass-through would not generally be a concern. POTW treatment also provides relatively high removals of most non-volatile organics through biodegradation. Exceptions again being the three classes of compounds noted above, which have significant potential for sludge contamination. Limits for these can be developed as for metals.

EPA's 1987 local limits manual provides a methodology for calculating local limits for volatile organics in order to protect against explosivity and fume toxicity. The methodology estimates the fraction of the organic that will partition into the atmosphere through the use of the Henry's Law Constant for the compound at room temperature. This constant is a ratio of vapor pressure to water solubility at a given temperature. The local limits manual lists Henry's Law Constants for a number of organic compounds. Additional data can be obtained from sources such as the CRC Handbook of Chemistry and Physics. Once the vapor phase concentration is estimated, this can then be compared to the allowable concentration necessary to prevent explosion and to protect POTW workers. The local limits manual lists the

Lower Explosive Limit (LEL) and corresponding liquid phase concentrations, already incorporating the Henry's Law conversion. It has done the same thing using the OSHA standards for exposure to vapors for a 40-hour week.

Similar liquid phase limitations for volatile organics can be developed using this approach and data from other sources. For instance, the OSHA standards also prescribe short-term exposure levels, allowable for only 15 minute periods. The POTW may decide that this is more appropriate for the development of a local limit in its particular case. In general, the fume toxicity aspect will govern, usually being a more stringent requirement than preventing explosive levels of vapors.

In 1992, EPA and DEQ distributed Guidance to Protect POTW Workers from Toxic and Reactive Gases and Vapors. A listing and description of typical volatile organics from that guidance is included provided below.

VOLATILE ORGANIC PRIORITY POLLUTANTS

Acrolein - used as feedstock for some types of plastics, plasticizers, acrylates, textile finishes and synthetic fibers.

Acrylonitrile - used in the manufacture of acrylic fibers, acrylostyrene plastics, nitrile rubbers, surface coatings and adhesives.

Benzene - used in the manufacture of detergents, dyes, linoleum, artificial leather, varnishes, lacquers, explosive, pharmaceuticals and pesticides. Also used as a motor fuel constituent, as a solvent, and in the extraciton of oils from seeds and nuts.

Bromoform - used in pharmaceutical and fire-resistant chemical manufacturing, and as a solvent.

Carbon Tetrachloride - used as a solvent, and to chemically synthesize fluorocarbons; also used as dry cleaning agent, a fire extinguishing agent, and a fumigant.

Chlorobenzene - used as a solvent for degreasing and in paint and pesticide manufacturing.

Chlorodibromomethane (dibromochloromethane) - no uses.

Chloroethane - used in the manufacture of tetraethyl lead, dyes, drugs, and ethyl cellulose, as a solvent and a refrigerant. Has very low water solubility.

2-Chloroethyl Vinyl Ether - used in the manufacture of anesthetics, sedatives and cellulose ethers.

Chloroform - widely used as a solvent, especially in the lacquer industry, is also used as a cleaning agent, and in the manufacture of pharmaceuticals, plastics, dyes, pesticides, floor polishes and fluorocarbons.

Dichlorobromomethane - used as a laboratory reagent.

1,2-Dichloroethane - converted to vinyl chloride and other chlorinated chemicals. Is also used as a solvent, degreaser and a dry cleaning agent and in the manufacture of nylon, rayon, rubber, paint, varnish and finish removers.

1,1-Dichloroethane - is used as a solvent and cleaning agent in specialized processes.

1,1-Dichloroethylene - used as an intermediate for the copolymerization with other monomers to produce "vinylidene polymer plastics".

1,2-Dichloropropane - used as a degreaser and a dry cleaning agent and in the manufacture of plastics, rubber and waxes.

1,3-Dichloropropylene - used together with 1,2-dichloropropene as a soil fumigant.

Ethylbenzene - intermediate in the synthesis of styrene, and in the manufacture of cellulose acetate and synthetic rubber. Is used as a solvent for paints, varnishes, coatings and enamels.

Methyl Bromide - used as insect fumigant, a refrigerant, an herbicide, a fire extinguishing agent, for degreasing wool and extracting oils from nuts, flowers and seeds.

Methyl Chloride - used as an extractant in petroleum refineries, a solvent in the synthetic rubber industry, as a paint remover, or in solvent degreasing.

Methylene Chloride - widely used as a solvent by many industries and for extraction in the food industry.

1,1,2,2-Tetrachloroethane - used as a nonflammable solvent and as a dry cleaning agent and in the manufacture of chlorinated hydrocarbons, paint, varnish, lacquers, cement and rust removers.

Tetrachloroethylene - widely used solvent particularly as a dry cleaning agent and for metal degreasing.

Toluene - major raw material for organic chemical synthesis, is also used in paints, organic dyes, coatings, and inks and as a solvent.

Trans-1,2-Dichloroethylene - is used as a solvent in the extraction of rubber, as a refrigerant and in pharmaceutical manufacturing.

1,1,1-Trichloroethane - major use is as a metal cleaning solvent and degreaser.

1,1,2-Trichloroethane - used as a solvent and as an intermediate in organic synthesis.

Trichloroethylene - used as metals degreasing agent and as an organic solvent; is in a wide variety of solvent cleaning products.

Vinyl Chloride - used primarily as a vinyl monomer in the manufacture of polyvinyl chloride plastic resin.

APPENDIX M –PRETREATMENT INSPECTION REPORT

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

A. General Information

Date of Inspection
Time:

Purpose of Inspection

Industry Name:
Permit #

Site Location:

Correspondence Address:

Name of Receiving POTW:

Participants:	Name/Title	Phone No.
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- 1) DEQ Inspector:
- 2) SIU Contact:
- 3) POTW Representative:
- 4) Other:

Is the SIU subject to categorical pretreatment standards? ☐ Yes ☐ No

If yes, list categories and applicable limits:

Is the industry an existing (PSES) or new (PSNS) source? Yes ☐ No

Type of operation or products and applicable Standard Industrial Classification(SIC) code(s):

Number of employees per shift:	_____ / _____ / _____	
Total daily flow of industrial waste:	_____ GPD Max / _____	_____ GPD Avg
Total daily flow of sanitary waste:	_____ GPD Max / _____	_____ GPD Avg

Source of the flow information:

Are the sanitary and industrial wastewater streams combined? ☐ Yes ☐ No

Prior to wastewater treatment? ☐ Yes ☐ No

Prior to connecting to the POTW sanitary sewer? ☐ Yes ☐ No

B. Facility Diagram

Sketch or attach a schematic of all wastewater discharge lines which combine to flow to the POTW system.

C. Industrial Processes and Pretreatment

1. Describe the basic industrial process and any constituent unit operations. Include auxiliary or utility processes, such as boiler or cooling tower blowdown and heating or cooling streams which discharge to the POTW. Sketch or attach a block process flow diagram, noting which process steps generate wastewater.
2. Indicate which of these wastewater streams receive some form of pretreatment.
3. Describe the pretreatment system used by the facility. If the system has multiple process steps, provide a block diagram indicating the treatment steps and their sequence.
4. Is the pretreatment facility properly operated and maintained? (Pertinent characteristics to check might include the availability of standby power, alarm systems, operational manuals, calibration of control instrumentation, and disposal of sludges and routing of liquid return from sludge dewatering equipment.)
5. List pollutants at the plant, categorized as follows:

Pollutants that come into direct contact with the water that is discharged to the POTW:

Pollutants that do not come into direct contact, but have the potential to enter through spills, malfunctions, etc.:

6. Does the facility have any air pollution control equipment which generates wastewater? ☐ Yes ☐ No
If yes, is this wastewater accounted for in the permit application and permit? ☐ Yes ☐ No
If yes, describe the flow rate, composition, and the discharge method and location:
7. Is the facility a RCRA Hazardous Waste generator (either through the basic process or residuals from treatment processes)? ☐ Yes ☐ No
Has the industry submitted the required hazardous waste notification to the POTW of the discharge of any waste that, if otherwise disposed of, would be a hazardous waste? ☐ Yes ☐ No;
Date of the letter
Describe the hazardous waste storage and disposal procedures to include residuals from the pretreatment system. (Hauler & disposal location):

D. Sampling

Can all the required grab or composite samples be collected at the designated location(s)?
Yes ☐ No ☐

Where is the sample point(s) located? (If possible, note on the wastewater discharge schematic for Section A of this checklist).

Does the industry perform sampling and/or analyses required for self-monitoring "in-house"?
☐ Yes (some) ☐ No

If IU conducts analysis, is the analysis performed in accordance with EPA specified methods?
Yes ☐ No ☐

Is sampling conducted according to EPA or approved methodologies? ☐ Yes ☐ No

If contract laboratory(s) is used, record the name and business address:

If used for permit compliance, is flow meter(s) calibrated?

☐ Yes ☐ No ☐ NA Date of last calibration

If used for permit compliance, is pH meter(s) calibrated and documented?

☐ Yes ☐ No ☐ NA

E. Spill Prevention

Does the facility have a slug/spill prevention or control plan? ☐ Yes ☐ No

Date last updated:

Since the last inspection, have there been any spills?

Are process chemicals stored in contained areas? ☐ Yes ☐ No

Is there a potential for spilled process chemicals to enter the sanitary sewer system? ☐ Yes
No; or storm sewer? ☐ Yes ☐ No

Are there floor drains in the facility? ☐ Yes ☐ No If yes, do the floor drains discharge to the
sanitary sewer or storm sewer?

Are employees informed of the need to keep unauthorized chemicals out of the sanitary sewer?
Yes ☐ No; If yes, by what means:

If the industry is subject to the Electroplating, Electronics or Metal Finishing standards, and
has submitted a solvent/toxic organic management plan; has there been any change to the
contents and conditions outlined by the plan?

F. Pollution Prevention

1. Who is responsible for pollution prevention at the plant?
2. Does the facility have an Environmental Management System (EMS)? ☐ Yes ☐ No If
yes, identify the format of the system.
3. Describe the pollution prevention initiatives implemented during the past 2 years.
4. What kind of assistance is the company interested in receiving regarding the reduction
of wastes it generates?

G. Records

Are the permittee's records for sampling and analysis complete and accurate? ☐ Yes ☐ No
To include, date, signature, chain-of-custody, all required parameters.

Is the industry on a compliance schedule for the installation of any technology required to meet
the applicable pretreatment standards? ☐ Yes ☐ No

If so, note the progress of the industry in following this schedule

Are records available for at least three (3) years? ☐ Yes ☐ No

H Inspection Notes:

Requirements: Recommendations:

Pretreatment Inspection Form Guidance

A. General Information

- ◆ Date/Time - Self explanatory. This information could potentially be important in any legal or enforcement action that may arise as a result of the inspection.
- ◆ Purpose of Inspection - This will normally be "routine" or "routine bi-annual". However, if there is another purpose, such as assistance for the POTW or enforcement, note what the purpose is.
- ◆ Industry Name - Record the legal name of the industry as noted on the industrial user's Pretreatment Permit.
- ◆ Permit Number - Record the number of the permit issued to the industrial user by the POTW.
- ◆ Site Location - This is usually the street address of the industry being inspected. However, if a description or something else is more appropriate, record that.
- ◆ Correspondence Address - If mail is sent to a P. O. Box or somewhere other than the site location, record that address here. If the correspondence address is the same as the site location, then state "same as above". This should be the address to which all Pretreatment Permit related correspondence is sent.
- ◆ Receiving POTW - Record the name of the POTW that will receive the wastewater discharged from the facility inspected. This information may be useful later when doing quarterly reports or audits.
- ◆ Participants - Record the name and telephone number all people that participate in the inspection. This information may be helpful for and inspection follow-up or permit contact.
- ◆ Categorical Users - If the facility has effluent limits that are determined by Federal Effluent Guideline (40 CFR 405-471) check "yes". Some users are listed as categorical, but do not have categorical limits. Check "no" for these type of facilities.

If the facility has categorical limits, record the category as listed in the CFR, the CFR number and applicable subcategory. I.E.: Part 455, Pesticide Chemicals, Subpart C - Formulating and Packaging.

- ◆ New or Existing Sources - If the facility had an existing process at the time the Federal Effluent Guidelines were promulgated, the PSES limits should apply to this facility and "PSES" recorded on this line. If the facility with applicable categorical processes was constructed after the regulation was promulgated, the facility is a new source, PSNS limits should apply and "PSNS" recorded on this line.
- ◆ Type of Operation - Record the Standard Industrial Classification (SIC) Code and Designation. I.E.: #3555 Printing Trades Machinery & Equipment (Bookbinding Equipment Assembly). If you think additional explanation would be helpful fully identify or understand the facility, add more information. I.E.: Makes computer cases. This information may be helpful in determining potential pollutants, pollution prevention opportunities, appropriate limits, etc.
- ◆ Employees - Record the number of employees working at the facility. If there are multiple shifts, record the number on each shift. This information may be used to estimate the volume of sanitary flow from the facility.

- ◆ Industrial/Sanitary Flow Rates - Record the most recent average and maximum flow information available. Measured information is preferred, but if only an estimate is available, use the estimate. This information is useful in determining loadings to the POTW, appropriate limits if flow based, etc. Gallons per capita per day may be obtained from the Uniform Building Code manual, SCAT regulations, or other engineering sources.
- ◆ Industrial/Sanitary Connections: Check the appropriate answers to these questions. This information is helpful to know what exactly is being treated, sampled and where are the connections of process and sanitary flows. It may also be helpful to determine appropriate treatment, permit compliance, potential analytical interference, and understanding the facility discharges.

B. Facility Diagram

Diagrams are helpful in understanding the whole picture at the facility. It may be difficult to understand all the different industrial processes, non-process flows, treatment units and discharges without a diagram. If a diagram is available from permit application or other source, attach it to the report. If one is not available, a sketch or line-box drawing is recommended.

C. Industrial Processes and Pretreatment

1. Industrial Processes - List or describe the industrial processes at the facility. Then list or describe those processes that generate wastewater. Also list other auxiliary (non-contact cooling, steam condensate) or utility processes (cooling tower, boiler blowdown, RO, DI backwash).
2. Treated Wastewaters - List the process, auxiliary and utility wastewater streams that receive treatment. Also separately list the wastewater streams that do not receive treatment. This information may be valuable in assessing problems or permit violations at the facility.
3. Pretreatment System - Describe the treatment system at the facility, listing all unit processes. A block diagram is useful to help understand the treatment process and should be available during the inspection. Get the diagram from the permit application or if needed do the diagram yourself during the inspection. Obtain maximum flow rate and current flow rate.
4. Pollutant List
 - ◆ Contact pollutants are usually used in the production process and are things like raw materials, lubricants, acids/bases and paints.
 - ◆ The non-contact pollutants are usually things used at the facility but not directly in the production process. These are usually things like equipment fuels and lubricants, paints, solvents, cleaning solutions, etc. This information is useful in determining parameters for monitoring or limitation, items that should be in the Solvent Toxic Organics Management Plan (if applicable), etc. This information may also be helpful in tracking down sources of POTW upset, inhibition, pass through or slug discharges.
5. Air Pollution Control - This equipment usually produces either a solid or liquid waste. If wastewater is produced, ensure that the volume is known or estimated, the potential pollutants in the wastewater are known and where the wastewater is routed to in the facility. If a solid waste is produced, check to ensure proper final disposal. This information is also useful in determining parameters for monitoring and/or limiting, proper treatment of the wastestream and accurate flow estimation or recording. It is also recommended that you check with the air inspection staff in your office to ensure that both of you have complete information on the industry inspected.

6. If the facility generates hazardous waste, check "yes". If the facility is either a small quantity or large quantity generator, they should have a DEQ identification number (VAD####.....). If they are conditionally exempt by low volume, they are not required to have an ID number. If the facility does not generate hazardous waste in any amount, then check "no".
- ◆ 9 VAC 840.P. requires that industrial users notify the POTW, EPA and DEQ of the discharge to a POTW of a substance which if otherwise disposed of, would be a hazardous waste. Hazardous wastes are identified in 9 VAC 20-60. There are four possible levels of reporting required of the IU: (1) If there is a discharge of a hazardous waste over 100 kg per month, then the IU must report what the substance is, the ID# from the Hazardous Waste Regulations, type of discharge (batch or continuous), an estimation of the mass and concentration during the past month and an estimate of the mass and concentration for the coming year. (2) If the IU discharges any listed acute hazardous waste, they must report the same information as in #1 above. (3) If the IU discharges a non-acute hazardous waste in the range of 15-100 kg per month, the IU must report what the substance is, the ID # and type of discharge. (4) If the IU discharges a non-acute hazardous waste of less than 15 kg per month, then no reporting is required. Note that once the hazardous waste is discharged to the POTW it is classified a "hazardous substance" and is no longer technically considered a hazardous waste.

The vast majority of IUs do not discharge hazardous waste. However, some may not know if they do or not. If you have questions about the possible discharge of hazardous waste, check any effluent data that you or the POTW may have against the list of hazardous waste in that regulation. It is recommended that the POTW require the IU to document whether they are or are not discharging hazardous wastes.

Be aware that 9 VAC 25-31-800.F.2.c. requires that the POTW notify the IU of requirements in Subtitle C (hazardous wastes) and Subtitle D (solid wastes) of the Resource Conservation and Recovery Act (RCRA). IU mishandling of wastes may indicate that the POTW has not fulfilled that requirement.

- ◆ Briefly describe the storage and disposal of hazardous wastes. Are the wastes segregated and /or stored in a contained location? Are there satellite storage areas? List the waste hauler, disposal location and contents of recent hazwaste shipments.

D. Sampling

- ◆ Record "yes" if the sample point access allows use of appropriate containers, wastewater depth is adequate to collect all samples, etc. Check "no" if conditions at the sample point prevent the collection of any of the required samples.
- ◆ Note where at the facility the sample point is located. This should provide enough information so that someone unfamiliar with the facility should be able to find the sample point.
- ◆ Check "yes" if the industry performs any of the sampling or analysis required by their Pretreatment permit. Check "no" if a contract laboratory conducts all of the sampling and analysis.
- ◆ All analysis must be conducted in accordance with an EPA specified method. If the analytical method used is not an EPA specified method as listed in 40 CFR 136, then check "no" and make appropriate comments in the "requirements" section of your report.

- ◆ Check on proper sampling procedures. The proper containers, preservation and holding times are listed in 40 CFR 136. Other procedures can be found in *Standard Methods*, EPA manuals or the appropriate analytical method reference.
- ◆ If a contract laboratory is used, record the name and address of that lab.
- ◆ If the facility uses a flow meter to record and/or report flow volumes for permit compliance, that flow meter should be calibrated. Normally flow meters should be calibrated annually. Note "yes" or "no" as appropriate and if applicable record the date of the last meter calibration. If the flow meter has not been calibrated in the last year, make appropriate comments in the "Recommendation" section of the report.

E. Spill Prevention

- ◆ Note whether the IU has a slug control and/or a spill prevention plan. Spill plans may be incorporated into a variety of regulatory required plans, such as the Spill Prevention Control and Countermeasures (SPCC) Plan or the Oil Discharge Contingency (ODCP) Plan. Check to see if the plan has been recently updated. If not, and conditions at the facility have changed and the plan should be updated.

9 VAC 25-31-800.2.F.c. requires that the POTW evaluate the IU to determine the need for the IU to have a plan to control slug discharges. A slug is any discharge of non-routine, episodic nature, which may be a spill or non-customary batch discharge. A spill plan may meet the requirements of a slug control plan.

- ◆ Note any spills since the last inspection. Document whether the spill was contained, discharged to the sanitary sewer, or discharged to storm drains. Any spills that made it to sanitary or storm may indicate the need for a spill or slug control plan or an inadequate plan. If the spill made it to the sanitary system, did it cause permit violations, pass through, inhibition or interference?
- ◆ Note if process chemicals are stored in a contained area or not.
- ◆ Process chemicals may pose a significant threat to either the sanitary or storm system. Some means to prevent loss of the chemical to either system should be in place at the facility.
- ◆ Note if there are floor drains in the facility. If so, do the drains flow to either sanitary or storm systems? Do the floor drains flow to the pretreatment system? If there are floor drains, the floor drains should not be a potential source of permit violation, pass through, inhibition or interference. Floor drains may need to be sealed to prevent problems.
- ◆ Does the IU provide employees with training regarding the proper handling and disposal of chemicals? The dumping of waste materials, off spec products or excess process chemicals may contribute or cause permit violations or other problems. The IU should have some sort of training program in place, especially for new employees.
- ◆ The three listed categorical industry types may be allowed to submit a Solvent Toxic Organic Management Plan (STOMP) in lieu of sampling for Total Toxic Organics (TTO) as listed in the appropriate CFR section. The STOMP must include at a minimum, the list of toxic organics used at the facility, the method of disposal used and procedures for assuring that the organics do not spill or leak into the sanitary system. It is also helpful to know what the organic is used for at the facility. If the IU submits a STOMP, they must also submit a certification statement regarding the dumping or toxic organics to the POTW. The STOMP must be updated in conditions at the facility change.

F. Pollution Prevention

1. Note the person(s) at the facility responsible for pollution prevention activities at the facility. If there is no one, encourage the IU to consider P² initiatives and have someone at the facility oversee that activity.
2. Note if the facility has an Environmental Management System (EMS) in place or in development. Also note the format of the EMS, such as ISO or DEQ.
3. Describe any P² activities that the IU has implemented in the last two years.
4. Ask the IU representative if he/she are aware of the DEQ Office of Pollution Prevention. If not, inform them about that Office and their activities. Stress the non-regulatory nature of the program. If either case ask if the IU is interested in receiving P² assistance from DEQ.

G. Records

- ◆ Note whether the IU's records contain all the required information. This should include sample date, time of sample, sampler's name or initials, sample stabilization, analysis date, analysis time, analyst's name or initials. Refer to the *DEQ SOP for Laboratory Inspections* for more information.
- ◆ An existing categorical industrial user may be on a compliance schedule due to a new categorical determination/regulation. So there are potentially not immediate permit violations and/or enforcement action, 9 VAC 25-31-780. B. allows an existing IU up to three years to meet the new requirements. Note whether the IU is on a compliance schedule to meet requirements and if they are meeting the scheduled dates.
- ◆ All records pertaining to the IU's pretreatment permit must be kept for at least three years. The IU must be able to produce the records for review at any time. It is recommended that records review concentrate on recent records and only verification of maintenance of older records.

H. Inspection Notes

- ◆ In the requirements section record anything noted during the inspection that must be corrected for compliance with the IU's Pretreatment Permit, the POTW's Pretreatment Program or DEQ Regulations. Explain fully, what is required to bring the facility back into compliance. If a violation of any permit, program or regulation is found, that should also be noted.
- ◆ In the recommendations facility note anything noted during the inspection that may help the facility comply with their Pretreatment Permit. Also note any comments that may help improve compliance with any environmental regulations, wastewater treatment, waste handling, safety or general conditions at the facility.

APPENDIX N –POTW Annual Report (Form and Instructions)

PART A
PRETREATMENT PERFORMANCE SUMMARY

I. General Information

Control Authority Name _____
Address _____
City _____ St _____ Zip _____
Contact Person _____
Contact Telephone Number _____
VPDES Permit Nos. _____
Reporting Period _____
Total Categorical IUs _____
Total Non-Categorical SIUs _____

*I certify that the information contained
is complete and accurate to the best of
my knowledge*

Authorized Representative Date

II. SIU Compliance

INDUSTRIAL USERS
Categorical Non-Categorical

1. No. of CIUs Submitting BMRs/No. Required	____/____	
2. No. of CIUs Submitting 90-day Compliance Reports/No. Required	____/____	____/____
3. No. of SIUs Submitting Self-Monitoring Reports/No. Required	____/____	____/____
4. No. of SIUs Meeting Compliance Schedule/No. Required to Meet Schedule	____/____	____/____
5. No. of SIUs in Significant Non-Compliance/Total No. of SIUs	____/____	____/____
6. Rate of Significant Non-Compliance for all SIUs Categorical and Non-Categorical) .	_____	_____

III. Compliance Monitoring Program

1. No. of Control Documents Issued/No. Required	____/____	____/____
2. No. of Non-Sampling Inspections Conducted	_____	_____
3. No. of Sampling Visits Conducted	_____	_____
4. No. of Facilities Inspected (Non-Sampling)	_____	_____
5. No. of Facilities Sampled	_____	_____

IV. Enforcement Action

1. Compliance Schedules Issued/Schedules Required	____/____	____/____
2. Notices of Violations Issued to SIUs	_____	_____
3. Administrative Orders Issued to SIUs	_____	_____
4. Civil Suits Filed	_____	_____
5. Criminal Suits Filed	_____	_____
6. SIUs published for SNC (Attach Newspaper List)	_____	_____
7. Amount of Penalties Collected (Total Dollars/IUs assessed)	____/____	____/____
8. Other Actions (Sewer Bans, etc.)	_____	_____

INSTRUCTIONS FOR COMPLETION OF THE PRETREATMENT ANNUAL REPORT

Part A - Pretreatment Performance Summary

I. General Information

- Identifying Information - complete all items; Virginia Pollutant Discharge Elimination System (VPDES) permit numbers should include permit numbers for all treatment plants for which the Publicly Owned Treatment Works holds VPDES permits.
- Reporting Period - this should be January 1 through December 31.
- Total Categorical Industrial Users - the number of Categorical Industrial Users that discharge process waste included in one of the categories and the definition listed in Appendix A.
- Total Non-Categorical Industrial Users - the number of Significant Industrial Users that are not considered categorical.

Attachment A: List of Significant Industrial Users, with notation as to which are categorical, and the issuance and expiration dates for their permits.

Attachment B: Changes (additions/deletions) from the most recent industrial listing (original program submission or annual report) should be provided with the reason for the change.

II. Significant Categorical Industrial User Compliance

1. Provide the number of Categorical Industrial Users that have submitted Baseline Monitoring Reports and the number required to do so. A Categorical Industrial User may be considered to have submitted a Baseline Monitoring Report if an Industrial Waste Survey or permit application has been received which contains all the required BMR information. The number of Baseline Monitoring Reports required should equal the number of Categorical Industrial Users. This item should include all Baseline Monitoring Reports which have been due and not only those due during the reporting period.
2. Provide the number of Categorical Industrial Users that have submitted 90-day compliance reports and the number required to do so. The number required to submit a 90-day compliance report should include all Categorical Industries except those for which the final compliance date has not passed by more than 90 days.
3. Provide the number of Significant Industrial Users that have submitted all self-monitoring reports and the number required to do so. All Categorical Users that have been required to submit a 90-day compliance report must submit semi-annual reports; include all Significant Industrial Users subject to self-monitoring requirements.
4. A User is considered to be on a compliance schedule if there is a formal schedule contained in a order, agreement or other similar mechanisms, which provides specific dates by which the user will achieve compliance*. A letter from a User providing a compliance schedule is not considered a formal schedule even if the Publicly Owned Treatment Works has provided written acceptance of that schedule. Provide the number of Significant Industrial Users currently meeting their formal compliance schedule and the number currently on a formal compliance schedule.

*Compliance schedules may not be included in permits unless expressly stated in the legal authority of the Publicly Owned Treatment Works (Ordinance, Rules and Regulations), neither can administrative extensions of permits beyond the expiration date be granted unless stated in the legal authority of the Publicly Owned Treatment Works.

5. Calculate Significant Non-Compliance for each Significant Industrial User. Provide the number currently in Significant Non-Compliance and the total number of Significant Industrial Users.
6. Provide the rate of Significant Non-Compliance for all Significant Industrial Users. The rate of Significant Non-Compliance equals the total number of Significant Industrial Users currently in Significant Non-Compliance divided by the total number of Significant Industrial Users.

Attachment C: List of Significant Industrial Users in Significant Non-Compliance per quarter, including parameters in violation in each quarter.

Attachment D: Provide copies of compliance schedules issued to Significant Industrial Users, and status of compliance with the same.

III. Compliance Monitoring Program

1. Provide the number of permits issued and the number of Significant Industrial Users required to have control documents. At a minimum, each Significant Industrial User is required to be covered by a current permit. The number of permits issued does not include those whose expiration date has passed and have not been reissued.
2. Provide the total number of facilities inspected by the Publicly Owned Treatment Works during the reporting period. Two inspections at one facility counts as two inspections.
3. Provide the total number of sampling visits to Categorical and Non-Categorical Significant Industrial Users by the Control Authority during the reporting period. Two sampling visits at one facility counts as two sampling visits conducted.
4. Provide the total number of facilities inspected by the Control Authority during the reporting period. Two inspections of one facility counts as one facility inspected. Please note the difference between the number of sampling inspections and the number of facilities inspected.
5. Provide the number of facilities sampled by the Control Authority during the reporting period. Two sampling visits at one facility count as one facility sampled. Please note the difference between the number of sampling visits and the number of facilities sampled.

Attachment E: List of facilities not inspected during the reporting period and the reason for not inspecting them.

Attachment F: List of facilities not sampled during the reporting period and reason for not sampling them.

Attachment G: Copies of any Significant Industrial User permit pages changed during the course of the year, unless submitted previously.

IV. Enforcement Action

1. Provide the number of compliance schedules issued and the number required. A compliance schedule is considered to be required for all Significant Industrial Users in Significant Non-Compliance that cannot achieve compliance within 45 days (i.e. reporting violations generally do not require compliance schedules because the report can be submitted within a very short period of time in most cases). A compliance schedule is considered to be issued if the schedule is contained in a compliance agreement signed by both parties, or another independently enforceable document. A Significant industrial user is not considered to be on a compliance schedule if it has submitted a compliance schedule which has not been incorporated into an independently enforceable document.
2. Provide the number of written non-compliance notifications issued to Significant Industrial Users, and the number of Significant Industrial Users that have received such notification.
3. Provide the number of Administrative Orders (or equivalent actions) issued to Significant Industrial Users. Administrative Orders include compliance agreements and permit schedules.
4. Provide the number of civil suits filed in court.
5. Provide the number of criminal suits filed in court.
6. Provide the number of Significant Industrial Users in Significant Non-Compliance as defined by 40 CFR 403.8(F)(2)(vii).
7. Provide the number of enforcement actions taken by the Control Authority which are not included in items 2 through 5. "Other actions" can include sewer bans, permit revocations, show cause hearings, fines, etc.

Attachment H: List of Significant Industrial Users assessed penalties, the reason for the penalty and whether the penalty has been paid.

Attachment I: Description of all actions which have been included as Administrative Orders.

Attachment J: Copy of newspaper listing of Significant Industrial Users in significant non-compliance for the calendar year. (Copy of publication must be provided by March 31 at the latest, as an addendum to the report).

Part B - Pretreatment Developments

V. Summary of Publicly Owned Treatment Works Operations

Describe any interference, upset or permit violations, including sludge, which are attributable to industrial wastes, and actions taken to alleviate said events. Any data on sampling and analysis of Publicly Owned Treatment Works influent, effluent and sludge for toxic and incompatible pollutants collected during the reporting period is to be included, with a discussion of any noticeable trends in the sampling data for the past several years including graphs of comparisons on the removal of the toxics over the reporting period with the previous reporting period.

Attachment K: Results of any POTW influent, effluent and sludge sampling conducted during the reporting period, that has not been previously submitted to DEQ.

Attachment L: Provide POTW and self-monitoring results for Significant Industrial Users determined to be in significant non-compliance during the reporting period.

VI. Miscellaneous Developments

Describe any Publicly Owned Treatment Works facility changes which affect the program or other special concerns of the Control Authority, such as training needs and special assistance requirements.

Definition of “Categorical Industrial User” Under the Pretreatment Program

A Categorical Industrial User is an industry that discharges process waste to a Publicly Owned Treatment Works which is covered by a specific numerical National Categorical Pretreatment Standard (including a “no discharge” limitation), even if the Significant Industrial User is allowed to “certify” that it does not discharge that parameter. For example, a pharmaceutical manufacturer that has an VPDES permit for its process wastes but discharges normal domestic sewage to a Publicly Owned Treatment Works would not be considered a Categorical Industrial User. The Publicly Owned Treatment Works should, however, require this type of a Significant Industrial User to submit periodic reports that certify no discharge of categorical waste and perform a periodic inspection and sampling visit to confirm the discharge status. If the pharmaceutical process waste covered by the pretreatment standard were discharged to the Publicly Owned Treatment Works the industry would be a Categorical Industrial User. This is true even if the industry chooses to certify that it discharges no cyanide (the only parameter limited by the pretreatment standard in the pharmaceutical industry) as allowed by the standard.

Attached is a list of the 33 industrial categories that have specific numerical pretreatment standards. Please note that some of these categories have subcategories which do not contain limitations. One such category is Timber Products which has 16 subcategories (A through P), but only three of these have specific pretreatment standards (F, G, H). Therefore, Users which fall into subcategories A through E and I through P would not be considered Categorical Industrial Users.

CATEGORICAL INDUSTRIES

<u>Category</u>	<u>Regulation Status</u>
1. Aluminum Forming	Final
2. Asbestos Manufacturing	Final
3. Battery Manufacturing	Final
4. Coal Mining	Final
5. Coil Coating (I and II)	Final
6. Copper Forming	Final
7. Electrical and Electronic Components (I and II)	Final
8. Electroplating	Final
9. Ferralloy Manufacturing	Final
10. Fertilizer Manufacturing	Final
11. Glass Manufacturing	Final
12. Inorganic Chemicals Manufacturing (I and II)	Final
13. Ink Formulation	Final
14. Iron and Steel	Final
15. Leather Tanning and Finishing	Final
16. Metal Finishing	Final
17. Metal Molding and Casting	Final
18. Nonferrous Metals Forming	Final
19. Nonferrous Metals Manufacturing (I and II)	Final
20. Ore Mining and Dressing	Final

21.	Organic Chemicals, Plastics and Synthetic Fibers	Final
22.	Paint Formulation	Final
23.	Pesticide Chemicals	Final
24.	Petroleum Refining	Final
25.	Pharmaceuticals	Final
26.	Plastic Molding and Forming	Final
27.	Porcelain Enameling	Final
28.	Pulp, Paper and Paperboard	Final
29.	Rubber Manufacturing	Final
30.	Soap and Detergent Manufacturing	Final
31.	Steam Electric	Final
32.	Textiles	Final
33.	Timber Products	Final

DEQ REGIONAL OFFICES

Central	804-698-4028
Northern	703/583-3800
Piedmont	804/527-5020
Southwest	540/676-4800
Tidewater	757/518-2000
Valley	540/574-7800
West Central	540/562-6700

APPENDIX O – Safety

Inspection Safety

Safety is everyone's responsibility. As an inspector, your responsibilities include:

1. Actively participating in the safety program and training;
2. Applying the safe work practices that you have learnt on the job;
3. Recognizing the hazards of the job; and
4. Taking precautionary measures which will ensure both your own safety and the safety of all co-workers and informing your supervisor of any unsafe conditions, situations, and/or acts that are encountered during the performance of your duties.

A safe inspection begins in the office. You should ensure that all personal protective equipment is in reliable and working condition. Personal protective equipment should include:

1. Safety shoes (Good soles, laces that are not broken or excessively worn through);
2. Safety eye-ware that fit properly and are not scratched;
3. Hard hat;
4. Hearing protection;
5. Gloves, disposable or leather (without holes);
6. Clothing that fits proper and is appropriate for the field conditions expected;
7. Limited amount of jewelry if any; and
8. First-Aid kit

Once the facility has been identified, the inspector can properly prepare for the field inspection. The first step is to review the user's file, in detail. You should become familiar with the physical location of the user so that you can prepare for any hazards you might encounter while driving to the site. A file review will familiarize you with the operations being performed, identify any safety concerns, and provide information regarding chemicals that may be used at the facility.

There are many types of hazardous that can be encountered on a site inspection. A partial list will include:

1. Personnel that are quarrelsome or ill-tempered;
2. Physical hazards such as slipping or tripping hazards;
3. Noise;
4. High speed moving parts;
5. Parts or equipment that are operating at extreme temperatures;
6. Materials that may be flammable, corrosive, toxic, biohazards, etc.;
7. Fumes; and
8. Confined Space Entry.

While at the facility, you should follow all of the safety procedures identified by the facility host. They will be most knowledgeable of their operation. If they do not offer any safety comments, ensure that you inquire about the need for safety equipment. Observe and obey all warning signs.

As an inspector, you are responsible for your own safety in the field. If you encounter an unsafe condition or situation, you should remove yourself from the area and warn others.

APPENDIX P – Example Inspection Schedule

MEMORANDUM

DATE:

TO: Supervisor

FROM: Pretreatment Coordinator

COPIES: Central Office

SUBJECT: Pretreatment Significant Industrial User Inspection Schedule: FY20__

The purpose of this memo is to outline the pretreatment inspection schedule for Fiscal Year 20__ - 20__. There are two charts - (1) SIUs grouped by receiving POTW with the dates of the most recent and the next required inspection identified; (2) SIUs grouped by Fiscal Year by which their next inspection must be performed. The charts attempt to schedule or assist the scheduling for inspections through FY 20__.

CHART 1

Industrial Users	Status	Description	Last Insp.	Next Insp Due	Scheduled Date
Alexandria Sanitation Authority (VA0025160)					
Delta Electronics (a)	Categorical	Metal Finishing		FY 20	
Fairfax Hospital (a)	S.I.U.	Hospital		FY 20	
Springfield Offset (a)	S.I.U.	Printing		FY 20	
Arlington County (VA0025160)					
Coca-Cola Bottling Systems (a)	S.I.U.	Bottling	02/08/94	FY 1999	
Bergmann's	S.I.U.	Laundry	07/30/96	FY 2002	
Washington Metro. Area Transit Authority	Minor permit. Non-S.I.U.	Bus terminal	NA(<25,000)	NA	

CHART 2

This chart is sorted by the Fiscal Year by which the inspection needs to be performed, CIUs and then non-cat. SIUs, and then by receiving POTW. Obviously, there is flexibility to conduct inspections earlier than their "due date", and facilities in SNC or that necessitated DEQ pollution response will be given a higher priority.

Inspection Schedule Sorted by Fiscal Year: FY 20__ - FY 20__					
	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
1	Delta Electronics Alex - Cat	Advance Design Alex - Cat	Delta Electronics Alex - Cat	Advance Design Alex - Cat	Delta Electronics Alex - Cat
2	ESystems/Raytheon Alex - Cat	Fed Office Bldg #2 Arl - S.I.U.	ESystems/Raytheon Alex - Cat	Rochester Corp Culp - Cat	ESystems/Raytheon Alex - Cat
3	Fairfax Hospital Alex - S.I.U.	Marriot Mid Atlantic Arl - S.I.U.	Insteel Wire Fred - Cat	Cont Teves Culp - Cat	Insteel Wire Fred - Cat
4	Springfield Offset Alex - S.I.U.	Pentagon Arl - S.I.U.	Virginia Semicond Fred - Cat	Rent Unif Serv Culp - Cat	Virginia Semicond Fred - Cat
5	Washington Post Alex - S.I.U.	Rochester Corp Culp - Cat	Colonial Circuits Staff - Cat	Alex Metal Finshers Fairfax - Cat	Colonial Circuits Staff - Cat

APPENDIX Q – DEQ Checklist for Auditing POTW Pretreatment Programs

PART I: CONTROL AUTHORITY BACKGROUND INFORMATION

Audit Date:

Name of POTW:

Name of Control Authority (if different than above):

Mailing Address:

Participants (include name, title, organization, and phone number)

Principal Reviewer:

Pretreatment Contact(s):

List for each POTW:

VPDES Permit No.	Permit Status	POTW Name
------------------	---------------	-----------

List all changes which have occurred since the last audit which may impact the POTW's operation:

List all permit violations, pollution complaints or Board actions since the last audit:

Date that pretreatment program was approved:

Has the VPDES permit been modified to include pretreatment implementation requirements?

Yes No Date Modified:

Is the Control Authority currently operating under any consent decree or order that specifies pretreatment requirements? Yes No

Date of previous pretreatment program audit or inspection:

Name of inspector(s):

Control Authority representative(s):

Date of last Control Authority Report to Approval Authority:

POTW Treatment Plant Wastewater Flow:

Design Flow:

Average flow:

Percent Industrial Discharger Flow:

Level of Treatment	Type of Process(es)
--------------------	---------------------

PrimaryLittle Falls:

Secondary

Tertiary

PART II: PRETREATMENT PROGRAM OVERVIEW MODIFICATIONS

Are there any significant changes to the approved pretreatment program? Have these changes been submitted to the Approval Authority? Yes No

(Indicate below & attach a copy of changes if they have not been approved.)

Program Element Change	Submitted for Approval
Yes	No
Legal Authority	
Control Mechanism Implementation	
Local Limits	
Change in lists of IUs	
Inspection & Monitoring Program	
Enforcement Program	
Resources	

PART III: LEGAL AUTHORITY AND CONTROL MECHANISM

A. Legal Authority

1. Provide reasons for any changes to the POTW's legal authority (i.e., sewer use ordinance): (A copy of such changes should be attached per Section II of this checklist).
2. Has the POTW experienced any practical difficulty in implementing and enforcing the provisions of its SUO or other legal authorities? Yes No

If yes, briefly explain:
3. Does the POTW have the authority to seek or assess civil or criminal penalties of at least \$1000 per day per violation?

B. POTW Jurisdiction

1. Is the current jurisdictional situation the same as that documented in the approved program? Yes ☒ No ☐ If no, briefly describe any changes:
2. If all permits or agreements necessary to regulate IUs in outlying jurisdictions were not officially enacted at the time the program was approved, have they since been enacted?
Yes No
3. Have procedures been implemented in outlying jurisdictions which adequately address the following:

• Updating significant discharger survey	Yes	No
• Notification of the significant industrial users	Yes	No
• Permit Issuance	Yes	No
• Receipt & review of significant industrial user reports	Yes	No
• Inspection and sampling	Yes	No
• Analysis of samples	Yes	No
• Enforcement	Yes	No

Briefly describe any deficiencies:

Control Mechanism

1. Is the POTW implementing the approved control mechanism (i.e., significant industrial user permit system)? Yes No If no, explain: NA
2. Do all of the required significant industrial users have current (unexpired) control documents? Yes No If no, explain:
Give number of control documents issued/number required:
Give number currently expired:
3. Have any control documents been administratively extended? Yes No
Number:

Does the POTW's legal authority provide this option? Yes No
4. Does the POTW have a control mechanism for regulating waste received by truck, rail, or dedicated pipe? Yes No:
5. Has the POTW designated a specific discharge point(s) for hauled wastes (40 CFR Part 403.5(b)(8))? Yes No If yes, where?

D. Permit Boiler Plate

CHECKLIST FOR REVIEW OF BOILER PLATE LANGUAGE IN IU PERMITS

Standard Conditions	Section of Permit or Ordinance Where Located
	(Permit) (Ordinance)
1. Right of Entry	
2. Record Retention	
3. Penalty Provisions	
4. Revocation of Permits	
5. Permit Transfer	
6. Notice of Slug Loading	
7. Permit Expiration Date	
8. Permit Effective Date	
9. Definition of Terms	
10. Duty to Comply	
11. Duty to Mitigate	
12. Permit Modifications	
13. Severability	
14. Duty to Reapply	
15. Reopener Claus	
16. Prior Notification of Changes in Processes, Volume or Characteristics of Wastewater	
17. Proper Disposal of Sludge	
18. Proper Operation and Maintenance of Pretreatment Facilities	
19. Analytical Methods	
20. Signatory & Certification Requirements	
21. Dilution	
22. Property Rights	
23. Bypass	

24. Duty to Halt or Reduce Activity
25. Representative Sampling
26. Flow Measurements
27. Additional Monitoring
28. Inspection and Entry
29. Falsifying Information
30. Planned Changes
31. Upset
32. Duty to Provide Information
33. Noncompliance Notification
34. Calibration and Maintenance Records

PART IV: APPLICATION OF PRETREATMENT STANDARDS

A. Industrial Characterization

1. How often, and by what method has the POTW updated its Industrial Discharger Survey to identify changes in wastewater discharges?
2. Give the current number of significant industrial users of each of the following types:
 - Categorical industries:
 - Significant non-categorical (25,000 est. GPD) :
 - Other industries deemed significant by POTW:
 - Total:
3. How are categorical industries identified and categorized? Plans & Specifications and inspection reports are reviewed and compared with EPA Guidance Manuals and literature. DEQ assistance is also used.
4. Have any new industries been added since the original survey which are capable of causing interference or pass through or contribute significantly to the treatment plant's toxic loading? Yes No If yes, specify:

B. Local Limits

1. Has the POTW established local limits? Yes No:
2. If the POTW has made or proposed any changes to its local limits, what was the principal reason for the modifications? (A copy of such changes should be attached per Section II of the checklist.) NA
3. How did the POTW evaluate the need for local limits?
4. Are local limits technically based? Yes No
Do they provide protection from interference, pass through, sludge contamination, and protect worker safety? Yes No

Comments:

5. What types of site-specific monitoring data were used to determine local limits?

Sampling Data: Influent Effluent Sludge
Ambient receiving water monitoring data

Biomonitoring data

Priority pollutant analyses

Other (specify):

6. If there is more than one treatment plant, were the local limits established specifically for each plant? Yes No
7. Have there been instances of treatment plant inhibition/upsets during the past year? Yes No If yes, briefly describe: N
8. Does the POTW attempt to determine if such inhibitions/upsets are related to industrial wastes and to trace the problem to the discharger? Yes No
9. Have there been instances of pass through violations in the past year? Yes xNo
If yes, briefly describe:
10. If any VPDES permit violations have been caused by discharges of high-strength conventional wastes, what measures are being taken to correct the problem?
11. Have POTW workers experienced industrial waste related injuries or illnesses? Yes No
If yes, explain:
12. How many times during the past 12 months were the following flows monitored for toxics? (Attach the latest copy of analytical results for each).

Influent	Effluent	Sludge
Metals (zinc only)		
Organics		
Biomonitoring		
TCLP		
13. Has monitoring at the treatment plant shown a noticeable change in whole effluent toxicity or in the quantity of metals or toxic organics in influent, effluent or sludge? Yes No If yes, provide details:

C. Standards and Requirements for Significant Industrial Users

1. Has the POTW notified its significant industrial users of the pretreatment standards and requirements they must meet? Yes No:
2. Does the POTW compare local limits against Federal categorical standards and apply the most stringent standards to the categorical Industries? Yes No:
3. Is the method of remaining abreast of categorical regulations adequate to ensure that the POTW is prepared to properly implement categorical standards? Yes No
4. For industries with combined waste streams, is the combined waste stream formula being correctly applied? Yes No NA
5. For industries subject to production-based standards, do limitations in control documents incorporate them properly? Yes No NA
6. Are all applicable local, State and Federal standards included in control documents issued to significant industrial users? Yes No

7. Are TTO standards or alternatives (solvent management plans or oil and grease monitoring) being implemented for industries subject to TTO limitations? Yes
No NA:
8. Has the POTW notified significant industrial users of RCRA obligations? Yes
No
9. Are all applicable categorical standards and local limits applied to dischargers whose wastes are trucked in to the POTW? X Yes No NA
10. Has the POTW evaluated at least once every two years, whether each significant industrial user needs a plan to control slug discharges? x Yes No
11. If any of the answers to questions 1-10 are "no", briefly explain: NA
12. List below any available EPA guidance materials which the POTW does not have, but should have: NA

Other Supporting Comments:

PART V – COMPLIANCE MONITORING

A. Inspection and Monitoring

1. What is the current frequency (attach schedule, if available) for:

	Number times/year/SIU
	Categorical Noncategorical

- a. POTW sampling of significant industrial users
 - b. POTW inspections of significant industrial users
 - c. Significant industrial user self-monitoring
 - d. Significant industrial user reporting
2. Are the monitoring and reporting frequencies the same as those described in the approved program?

	Same	Less	Greater	Reason
--	------	------	---------	--------

- a. POTW sampling of SIUs
 - b. POTW inspections
 - c. SIU self-monitoring
 - d. SIU reporting
3. List any significant or categorical dischargers which were not sampled and inspected within the last year, and provide a reason. (Attach additional pages if necessary).

Date Inspection/Sampling	Name of SIU	Reason	is Planned
--------------------------	-------------	--------	------------

4. Are composite samples used to evaluate compliance with categorical standards when appropriate? Yes No NA
5. Are grab samples used in monitoring for pH, oil and grease, cyanide, volatile organic, total phenol and sulfide? Yes No
6. Does the POTW sample for all regulated pollutants? Yes No
7. Are samples split with industrial personnel: If requested? Yes No
If necessary to verify IU self-monitoring results? Yes No
8. Are chain-of-custody procedures employed (attach copy of custody form, if available)? Yes No
9. Do all sampling and analytical procedures conform to EPA methodologies (including 40 CFR Part 136)? Yes No
10. Indicate where the following pollutant analyses are performed (i.e., in-house laboratory, contract laboratory, etc.)

Metals:

Cyanide:

Organics:

11. Is a QA/QC program implemented for sampling? Yes No
For analysis? Yes No
12. How much time normally elapses between sample collection and obtaining analytical results?
13. Is the Control Authority prepared to take samples on short notice (i.e., vehicles, personnel, preservatives, etc. readily available)? x Yes No

Briefly describe any deficiencies in demand monitoring capabilities: NA

14. Are sampling locations, techniques, preservatives, etc., clearly detailed for sampling personnel before they take a sample? Yes No (PROCEDURES ARE OUTLINED IN THE APPROVED PROGRAM).

Briefly describe any deficiencies in the POTW's ability to perform routine compliance monitoring:

15. Do the POTW's inspections of SIUs consist of:

Inspection of manufacturing facility?	Yes	No
Inspection of chemical storage areas?	Yes	No
Evaluation of hazardous waste generation?	Yes	No
Inspection of spill prevention and control procedures?	Yes	No
Inspection of pretreatment facilities?	Yes	No
Inspection of SIU sampling procedures?	Yes	No
Inspection of lab procedures?	Yes	No
Inspection of monitoring records?	Yes	No

B. SIU Self-Monitoring and Reporting

1. Are categorical SIUs required to sample for all pollutants regulated in the categorical standards? Yes No
2. Does the POTW routinely review the periodic self-monitoring reports and compare the results to the applicable pretreatment standards? ☒ Yes No
3. Have the following reports been received from all categorical IUs for which the due date has passed?

	Number Received	Number Required
--	--------------------	--------------------

Baseline Monitoring Reports (BMRs)

Compliance Schedule Milestone Reports

90-Day Final Compliance Reports

Is the information contained in these reports analyzed and verified by the POTW?

Yes No
4. Are the SIUs required to report spills, slug discharges, etc., to the POTW? Yes No
5. Are all reports signed by a responsible corporate official or authorized representative? Yes No

If reports are signed by an authorized representative, was the authorization in writing? Yes No
6. If the answer to any of questions 1 - 5 is no, briefly explain: NA

PART VI: ENFORCEMENT

1. Has the POTW's ERP been approved? Yes No Date:
2. Estimate the number of SIUs that are currently in SNC with pretreatment standards and whether non-compliance results from lack of pretreatment facilities or O&M problems:

Number of SIUs Not in Compliance

	Total	Treatment	Lack of O&M
a. Noncompliance with Categorical Standards			
b. Noncompliance with Local Limits			
c. Noncompliance with General or Prohibitive Discharge Standards			

3. Estimate the number of SIUs that are currently in SNC with:
Number of SIUs in Noncompliance:
 - a. Self-Monitoring Requirements
 - b. Reporting Requirements
4. Approximately how many (or what percent) of all SIUs were subject to any kind of enforcement during the last 12 months?
5. Indicate whether the following types of compliance/enforcement actions have ever been used by the POTW during the past 12 months: Yes No
Verbal warning
Written notice or letter of violation
Issue compliance schedule
Revoke permit
Consent decree
Civil penalties (fines)
Criminal penalties
Termination of service
Injunction relief
Other (specify):
6. Has the Control Authority used any unusual enforcement techniques that are effective which POTWs could benefit by knowing? If yes, briefly describe:
7. Has the POTW published an annual notice of SIUs in SNC (40 CFR Part 403.8(f)(2)(vii))?
8. Does the POTW require the development of compliance schedules when installation of pretreatment facilities or additional O&M is necessary for a SIU to achieve compliance with applicable pretreatment standards? Yes No
9. How many SIUs are currently on compliance schedules?
Have any of these SIUs been allowed more than 3 years from the effective date of a categorical standard or local limits to achieve compliance? Yes No
If yes, provide details:
10. Have all New Source Categorical Industries been in compliance from the first day of discharge? Yes No
11. Of those SIUs identified as being in SNC in the last annual report, identify all SIUs who have not achieved compliance as of the time of the inspection, how long since they were first identified as being in SNC, what enforcement actions have been taken to bring these SIUs into compliance, and when such actions taken. (If the annual report did not include such a list, identify all SIUs now in SNC, the period of time since they were identified as in SNC, the enforcement actions which have been taken, and when those actions were taken.)
12. Does the Control Authority have procedures that define the appropriate enforcement response and time frames to initiate the response for different types and patterns of IU violations? Yes

Other Supporting Comments: None

PART VII: DATA MANAGEMENT AND PUBLIC PARTICIPATION

A. Data Management

1. Are files/records maintained on each categorical and SIUs? Yes No, and
Are they ☒ computerized? Hard copy? Both?
2. Does the POTW have an ample source of technical documents for implementing its pretreatment program? Yes No (EPA Publications, DEQ Guidance Manual (1993))
3. Does the POTW keep apprised of current regulations? Yes No
4. Are data on permit issuance and compliance status readily available? Yes No
5. Are inspection and sampling records well organized and readily retrievable? Yes No
6. Can SIU monitoring data be retrieved by:

Yes No

Industry name?
Pollutant Type (parameters)?
Industrial category or type?
SIC code?
SIU discharge volume?
Geographic location?
Receiving treatment plant?
(if there is more than one plant)
Other (specify):
7. Are all records maintained for at least three (3) years? Yes No

B. Public Participation

1. Are program records available to the public? Yes No
2. Have IUs requested that data be held confidential? Yes No
3. Does the POTW have the provisions to address confidentiality? Yes No (In SUO) With the pending approval of an IJA with Quantico, this provision may become necessary in the near future.
4. Has public comment been solicited during revisions to the SUO and/or local limits (7.6.F.5.g)? Yes No NA Solicited during program approval.
5. Are there significant public or community issues impacting the POTW's pretreatment program? Yes No If yes, please explain: NA

PART VIII: PROGRAM RESOURCES

A. Personnel and Equipment

1. Does the POTW have the same or greater resources (full time equivalents and equipment) than was stated in the submission? ☒ Yes No
If no, describe the nature of the reduced resources: NA

2. Are an adequate number of personnel available for the following program areas?
 Yes No
 SIU sampling
 SIU sample analyses
 SIU inspections
 Administration (including record keeping/data management)
 Data analysis, review and response
3. Do available personnel have appropriate training? Yes No (EPA/WEF Training, Pretreatment Conferences)
4. Is the available sampling equipment adequate? Yes No
5. Is the available safety equipment adequate? Yes No
6. Does the POTW have detectors for flammable, explosive and toxic vapors; and are such devices employed by the POTW? Yes No
7. Is the number of vehicles available adequate? Yes No
8. Does the POTW have access to adequate analytical capabilities (refer to Section V. A. 9)? Yes No

B. Funding

1. Have any problems in program implementation been observed which appear to be related to inadequate funding? Yes No

 If yes, describe: NA
2. Is funding expected to continue near the current level? x Yes No (Increase decrease)

Other Supporting Comments:

PART IX: POTW FILE REVIEW

INSTRUCTIONS: Review the POTW's files on a representative sample of SIUs (at least 5 files), attempting to include some significant noncomplying SIUs and two categorical IUs. If the answer to the question is correct and should be answered yes, mark an "X". If the appropriate response is none or no, then mark with an "O". Numerical responses may also be required. Comments should be recorded on the narrative comments page.

- | | |
|---|--|
| <p>A. File Contents</p> <ol style="list-style-type: none"> 1. Does the IU file contain: <ol style="list-style-type: none"> a) Significant industrial user survey information? b) Description of wastewater flows & pollutants? c) Discharge permit application? d) Control document? e) POTW sampling results? f) POTW inspection report(s)? g) IU reports (BMR, 90-day, etc.)? h) IU self-monitoring results? i) Correspondence? | <p>IU1 IU2 IU3 IU4 IU5</p> |
|---|--|

- j) Telephone log?
- k) Meeting Notes?
- l) Determination of IU compliance status?

B. Control Mechanism Evaluation

1. Does the permit require the IU to submit all monitoring results conducted according to 40 CFR Part 136? Yes No:
2. Does the permit require resampling and resubmittal of results within 30 days of becoming aware of a violation? Yes No:
3. Does the permit have the Right of Appeal Clause? Yes No:
4. Does the permit address confidentiality? Yes No
5. Does the permit address the duty to provide information? Yes No:
6. Does the permit require the notification to the Control Authority within 24 hours of identification of a violation? Yes No:

7. Permit Limit Application IU1 IU2 IU3 IU4 IU5

Were local limits/categorical standards properly applied?

- b) If applicable, were production-based standards correctly applied?
- c) If applicable, were CWF/FWA formulas correctly applied?
- d) Are any TTO requirements or alternatives correctly applied?
- e) Are sampling locations & frequency specified?
- f) Does the permit specify appropriate sample type?
- g) Are appropriate reporting requirements included..?
- h) Is the permit effective for 5 yrs or less?

C. POTW Compliance Monitoring Evaluation

Within the last twelve months: IU1 IU2 IU3 IU4 IU5

1. How many times was the IU inspected?
2. Approximately how many sampling visits were made to the IU?
3. Were all the parameters specified in the control mechanism evaluated by the POTW?
4. Indicate TTO monitoring status:*
5. Are monitoring results well documented?
Date sample taken
Type of sample
Sampler name
Condition of the sample, preservatives, etc.
Chain of custody form
Analytical procedures used
6. Did the IU inspection report have adequate documentation to support potential enforcement actions?
Did it include:
Date & Time of inspection?
Name of company official contacted?

Verification of production and flow rates?
 Identification of sources and types of wastewater
 (regulated, unregulated, process, nonprocessed, etc.)?
 Problems with pretreatment facilities?
 Evaluation of IU self-monitoring equipment and methods?
 Evaluation of spill containment

*(N) not regulated, (M) monitoring data submitted, (O) oil and grease surrogate, (S) solvent management plan submitted, (U) monitoring data/SMP required but not included in the file.

D.	IU Self-Monitoring Evaluation	IU1	IU2	IU3	IU4	IU5
1.	Were periodic IU self-monitoring reports submitted?					
2.	Were the required parameters evaluated?					
3.	Did the IU comply with the reporting requirements in the control mechanism?					
E.	POTW Enforcement Initiatives	IU1	IU2	IU3	IU4	IU5
1.	Did the POTW identify all IU violations? *In POTW monitoring results? *In IU self-monitoring results?					
2.	Was the IU notified of all violations?					
3.	Was compliance/enforcement action taken by the POTW?					
4.	Did the POTW's action result in the IU achieving compliance within three months?					
F.	Spills/Slug Loading	IU1	IU2	IU3	IU4	IU5
1.	Has the industry been responsible for spills or slug loads discharged by the POTW?					
2.	If yes, does the file contain documentation regarding: a) the spill or slug? b) POTW response to notification? c) POTW response to the discharge? d) the effect of the spill on the POTW?					
3.	Has the POTW evaluated the IU for the need of a slug control plan?					
4.	Does the IU slug control plan include: a) Description of discharge practices, including non-routine batch discharges? b) Description of stored chemicals? c) Procedures of immediate notification to POTW of slug discharge, including any discharge that would violate a prohibition under 403.5(b) with procedures for follow up written notification within 5 days? d) Procedures to prevent adverse impact from accidental spills including inspections and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment measures for containing toxic organic pollutants and measures and equipment for emergency response?					

Other Supporting Comments:

NARRATIVE COMMENTS FROM POTW FILE REVIEW

File 1

Industry Name:
File ID No.:
Industry Address:
Type of Industry:
Flow (gpd):
SIC Code:
Comments:

SECTION IX Completed by: Date:
Title: Telephone:

PART X: EVALUATION

INSTRUCTIONS:

Complete during or after on-site audit based on reviewer's analysis of program documentation and implementation. Distinguish between required POTW actions necessary to achieve compliance with the POTW permit ("P"), approved program ("A"), or General Pretreatment Regulations ("R"), and recommended actions to improve or refine the existing program.

A. LEGAL AUTHORITY AND CONTROL MECHANISM (PART III)

1. Describe required POTW actions to improve the existing legal authority or interjurisdictional agreements:
2. Describe recommended POTW actions to improve the POTW's application of pretreatment standards:

B. APPLICATION OF PRETREATMENT STANDARDS (PART IV)

1. Describe required POTW actions necessary to adequately apply prescribed standards:
2. Describe recommended POTW actions to improve the POTW's application of pretreatment standards:

C. OTHER COMMENTS: (See Final Summary Page)

D. COMPLIANCE MONITORING (PART V)

1. Describe required POTW actions necessary to comply with all compliance monitoring requirements:
2. Describe recommended POTW actions to improve the POTW's compliance monitoring program:

E. ENFORCEMENT (PART VI)

1. Describe required POTW actions necessary for proper enforcement of all pretreatment standards and requirements:
2. Describe recommended POTW actions to improve enforcement of pretreatment standards and requirements:

F. DATA MANAGEMENT AND PUBLIC PARTICIPATION (PARTS VI AND VII)

1. Describe required POTW actions necessary for compliance with data management and public participation requirements:
2. Describe recommended POTW actions to improve data management and public participation:

G. PROGRAM RESOURCES (PART VIII)

1. Describe required POTW actions necessary to comply with all resource requirements:
2. Describe recommended POTW actions to improve its ability to implement its pretreatment program:

PART XI: RNC/WENDB AUDIT SUMMARY

1. Did the POTW fail to submit any required pretreatment program report within 30 days of the deadline? Yes No (RNC) Explain:
2. Is the POTW under an Enforcement Order for previous violations of pretreatment implementation requirements? Yes No If yes, then (RNC). Explain:
3. Has the POTW missed a compliance date by more than 90 days? Yes No
4. Has the POTW failed to attain compliance within 90 days? Yes No If yes, (RNC).
5. Has the POTW failed to enforce against pass-through and/or interference? Yes No If yes, (RNC).
6. No. of Significant Industrial Users (SIUs) where the permit has not been issued: (WENDB)
7. Were all permits issued/reissued to 90% of SIUs w/i 6 months? Yes No If no, then (RNC).
8. Has the POTW performed a technical evaluation for the need for local limits? Yes No (WENDB)
9. Has the POTW adopted technically-based local limits? Yes No (WENDB)
10. No. of SIUs not inspected &/or sampled by the POTW in the past year: (WENDB). If > 20 % not inspected or sampled, (RNC).
11. No. of (total) significant industrial users: (WENDB)

12. No. of categorical industrial users: (WENDB)
13. No. of SIUs in SNC with pretreatment standards or reporting requirements: (WENDB)
If > 15% in SNC, then (RNC).
14. No. of SIUs in SNC w/self-monitoring requirements: (WENDB)
15. No. of SIUs in SNC with self-monitoring requirements, and that have not been inspected or sampled by the POTW in the past year: (WENDB)
16. No. of judicial actions filed against SIUs, whether civil or criminal: (WENDB)
17. No. of SIUs assessed penalties: (WENDB)
18. No. of SIUs that have been published: (WENDB)
19. No. of SIUs in SNC with compliance schedules to meet pretreatment standards and requirements: (WENDB)

SUMMARY REPORT

Recommendations for Action

Date

Mr. _____
Director of Utilities
_____ County
P. O. _____
_____, VA _____

RE: Pretreatment Program Audit of _____ on _____; VPDES No. _____

Dear Mr. _____:

Enclosed is a copy of my report for the Pretreatment Program Audit performed at the _____ facility on _____. Please review the audit report, in particular the page entitled Summary Report. On this page are recommendations for action. I would ask that you address these items, in writing, no later than _____. Your program was evaluated with respect to the requirements specified in the County's VPDES Permits, your approved Pretreatment Program, and the general Pretreatment Regulations.

If you have any questions, feel free to contact me at (703) _____. I would like to thank _____ for his time and assistance during the audit.

Sincerely,

Environmental Engineer

cc: OWPS
POTW

APPENDIX R – Rolling Quarters (for SNC) Guidance

Determination of Industrial User (IU) Significant Noncompliance (SNC)

1. The POTW (in conjunction with the Approval Authority) must establish its "Pretreatment Year."

2. At the end of each quarter, POTWs and States should evaluate their IU's compliance status for the two criteria which are evaluated on a six month time frame (i.e., the "A" and "B" criteria - 403.8(f)(2)(vii)(A) and (B)) as illustrated below. The example below assumes a "Pretreatment Year" equal to the calendar year.

FIRST EVALUATION PERIOD

End of previous
"Pretreatment Year"

Oct.	Nov.	Dec.
------	------	------

Beginning of the current
"Pretreatment Year."

Jan.	Feb.	Mar.
------	------	------

3. At the end of the first quarter (March 30th in our example), the POTW must evaluate the data from an industrial user for the previous six months (e.g., beginning with October 1 of the previous "Pretreatment Year" as in our example). Likewise, the POTW must evaluate six months of data at the end of each subsequent quarter (e.g., June 30th, September 30th, and December 31st).

SECOND EVALUATION PERIOD

Jan.

Feb.

Mar.

Apr.

May

Jun

4. At the end of the "Pretreatment Year," the POTW must summarize the compliance status of its industrial users over the reporting period and report on this compliance status to the Approval Authority. The POTW must publish all industrial users which were identified in SNC during the "Pretreatment Year," unless the IU was previously published for violations which occurred solely in the last quarter of the previous "Year."

THIRD EVALUATION PERIOD

Apr.

May

Jun.

Jul.

Aug.

Sep

FOURTH EVALUATION PERIOD

Jul.

Aug.

Sep.

Oct.

Nov.

Dec

End of the current
"Pretreatment Year."

APPENDIX S –Pretreatment Quarterly Report

Pretreatment Quarterly Report
for _____ Quarter, ____ - ____, 2002
for DEQ REGION _____ DUE to CO by 1/15, 4/15, 7/15, and 10/15

Pretreatment

- A. Conducts audits and follow-up of all approved local pretreatment programs to identify and correct deficiencies in POTW program implementation. Provide the name of the POTW audited, audit date, and permit number of the POTW:

	<u>Scheduled</u>	<u>Completed</u>
First Quarter (Oct – Dec):		
Second Quarter (Jan – Mar):		
Third Quarter (Apr – Jun):		
Fourth Quarter (Jul – Sep):		

Total:

- B. Modify PCS listing by means of uploading data from CEDs of POTWs required to have programs as changes are made. Provide a schedule for pretreatment program approval for these POTW's. (tell us the progress of program development for those programs that are being developed as "fully approved" programs. Need the date that the full program must be approved by when that date is determined (i.e., the clock starts running)
- C. Provide a current list of known industrial users discharging to non-pretreatment POTWs. Provide a yearly update of this list and provide yearly targets for IU inspections. A yearly update would be put on this form for the 4th quarter report, and would include a list of ALL IUs that go to nonpretreatment POTWs, and a tentative schedule (month/year) for when you will inspect them during the next fiscal year (which is October 2001 to September 2002 time fram). It's only reported once per year, but has the schedule for the next federal fiscal year.

Fourth Quarter:		Projected
<u>Facility POTW</u>	<u>VPDES</u>	<u>Inspection Date</u>

- D. Report on the compliance status of the CIUs in non-pretreatment cities.

<u>Facility POTW</u>	<u>VPDES</u>	<u>Compliance Status</u>

- E. VADEQ's highest inspection and discharge report review priority will be of categorical industries in non-pretreatment cities. Inspections of industrial users will be conducted commensurate with the manpower allocated for industrial user inspections. Provide the name of the IU inspected, inspection date, and permit number of the POTW to which the IU dischargers. (Need the RO's to list all the IU's that they inspected (with the requested details).

<u>Facility</u>	<u>CIU/SIU</u>	<u>POTW</u>	<u>VPDES#</u>	<u>Inspection Date</u>
-----------------	----------------	-------------	---------------	------------------------

First Quarter:

Second Quarter:

Third Quarter:

Fourth Quarter:

- F. Upload PPETS elements , RDN1 and RDN2 from CEDS 2000 into PCS for all pretreatment program audits, and annual reports.

NA

APPENDIX T – Database Management

Outfall Screen

The Outfall Screen is contained in the Permit Module and is accessed from the CEDS Main Menu Screen using: Applications\Permits\Water\VPDES. You must then query for a specific individual VPDES Permit. At the Individual Permit General Information Screen, click on the tab for Outfall Information/Limits.



Virginia Department of Environmental Quality - [VPDES Individual Permit]

Action Edit Block Field Record Query CEDS Window Help

VPDES Individual Permit

Permit No: **VA0060640** ☐ Application Facility: **North River STP**
☒ Active

Owner: **Harrisonburg-Rockingham Regional Sewer** Permit Writer: **Sours Dwight M**

General Information Events Special Conditions---Permit **Outfall Information/Limits** Land Application GIS Information

Outfall Information Special Conditions---Outfall Limits

Outfall No: **001** **Outfall Information** TMDL: **Yes**

SIC 4: **4952** Sub Basin: **B** Upper Potomac River & Shenandoah River Water Quality Standards: **Yes**

SIC 6: River Basin: **1** Potomac & Shenandoah River Basin Chesapeake Bay: **Yes**

River Mile: **15.01** Pretreatment Designator: **Pretreatment (Control POTW)** Tidal Waters: **No**

Basin Section: **5** Water Body: **No Pretreatment** TMP: **Yes**

Recv. Str. Class: **IV** Recv. Stream: **Pretreatment (Control POTW)** CZM: **No**

Topo Map No: **188C** Topo Map Name: **Under the control of "Y"**

Treatment Type: **8C** Description: **Tertiary Treatment** Date Pipe Went Offline:

Latitude: **38° 20' 22"** **Longitude:** **78° 55' 48"** Special Standards: **pH**

Pipe Flow Statistics (MGD)

Pipe Design Flow: 16	Harmonic Mean: 83.5	Low 1 Day Flow: 12.4	Low 7 Day Flow: 16.28
High 1 Day Flow: 29.21	High 7 Day Flow: 33.73	Low 30 Day Flow: 23.4	High 30 Day Flow:

DMR Comments: **Submit daily log report with DMR.** **DMR Print Date:**

Pretreatment Record: 1/1 <OSC> <DBG>

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The Outfall Screen contains the pretreatment designer. If you click on the down arrow, there is a list of 5 choices in the List of Values (LOV).

A pretreatment designer must be chosen for each outfall listed in CEDS, including sludge “outfalls”. You will not be able to access the POTW Audit, Annual Report or Industrial User Inspection Screens unless the correct pretreatment designer is specified. The following flow chart shows which CEDS screens may be accessed depending upon the pretreatment designer chosen:

The following table provides a description of the 5 choices in the pretreatment designer list:

Pretreatment Designator List of Values Options

<i>Pretreatment Designator List of Values (LOV) Box in CEDS</i>	<i>Description</i>	<i>How Indicated in CEDS Database</i>	<i>How indicated in EPA's PCS Database</i>
Under the Control of ?Y@	Used for POTWs with approved, developing or conditional pretreatment programs which have multiple STPs	Indicated with a ?C@after the permit number	Indicated with a "C" after the permit number
Pretreatment (Control POTW)	<p>Used for:</p> <p>(a) A single POTW with an approved Pretreatment program</p> <p>(b) The Control POTW if the approved pretreatment program includes multiple STPs</p> <p>Note: CEDS information for pretreatment annual reports, audits and inspections are found under the Control POTW</p>	Indicated with a ?Y@after the permit number	Indicated with a "Y" after the permit number
Developing Pretreatment Program	Used for POTWs which are in the process of developing an approved pretreatment program	Indicated with a ?D@after the permit number	Indicated with an "R" after the permit number
Conditional Pretreatment Program	Used for POTWs which have or are developing a conditional pretreatment program	Indicated with a ?P@after the permit number	Indicated with an "R" after the permit number
No Pretreatment	Used for POTWs which do not have an approved or conditional pretreatment program	No letter appears after the permit number if the POTW does not have any PT program requirements above the industrial waste survey requirements	Indicated with nothing after the permit number

Footnotes to Table:

1. **Control POTW and Under the Control of “Y”** - The approved pretreatment program may involve a service authority with multiple individual POTWs. In this case, one of the POTW facilities (usually the largest one) is designated as the Control POTW.

Pretreatment information contained in the POTW Audit, POTW Annual Report and IU Inspection Screens is found under the Control POTW for that service authority. The other facilities in the service authority will have the pretreatment designator Under the Control of “Y”.

2. **Developing Pretreatment Programs** – Use the pretreatment designator Developing pretreatment program for POTWs that are in the process of developing a fully approved pretreatment program. Don’t use this designator for POTWs developing conditional programs.

- (a) **Single POTW** – For a single POTW developing an approved pretreatment program, the initial pretreatment designator is developing pretreatment program. Once the pretreatment program is approved, the pretreatment designator is changed to pretreatment (Control POTW).

- (b) **More than 1 POTW** – If the POTW developing the pretreatment program has multiple STP’s use the pretreatment designator of Developing Pretreatment Program for the POTW you want to become the Control POTW. Use the pretreatment designator Under the Control of “Y” for the other facilities.

Once the pretreatment program is approved, change the pretreatment designator from Developing pretreatment program to pretreatment (Control POTW) for the main POTW. The pretreatment designator Under the Control of “Y” remains the same for the other POTWs.

3. **Conditional Pretreatment Programs** – Use the pretreatment designator Conditional pretreatment Program to designate that the POTW is either developing or has an approved conditional pretreatment program.

- (a) **Single POTW** – For a single POTW developing a conditional pretreatment program, use the pretreatment designator Conditional pretreatment program. Once the conditional pretreatment program is approved, the pretreatment designator is still Conditional pretreatment program.

- (b) **More than 1 POTW** – If the POTW developing the conditional pretreatment program has multiple STPs, use the pretreatment designator Conditional pretreatment program for the POTW you want to be the main POTW. Use the pretreatment designator Under the Control of “Y” for the other facilities.

4. **No Pretreatment** – The pretreatment designator No pretreatment is used for POTWs that are only required to do their industrial waste survey once every 5 years. No SIUs have been identified at these facilities.

Special Conditions Screen

The VPDES Permit Special Conditions are in the water permits module of CEDS. The Special Conditions Screen is accessed from the CEDS Main Menu Screen using: Applications\Permits\Water\VPDES. You must then query for a specific individual VPDES Permit. At the Individual Permit General Information Screen, click on the tab for Special Conditions - Permit. Listed in that section are all VPDES Permit Special Conditions, including the Pretreatment Special Conditions. The portions of the Pretreatment Conditions that require reporting should be listed in CEDS. The annual report and PN for SNC by March 31st of each year must be listed five times; one for each year of the permit life. List the Enforcement Response Plan and Significant User Survey. A due date for each condition must be placed in CEDS.

Virginia Department of Environmental Quality - [VPDES Individual Permit]

Permit No: **VA0060640** Application Facility: **North River STP** Owner: **Harrisonburg-Rockingham Regional Sewer** Permit Writer: **Sours Dwight M**

General Information Events **Special Conditions---Permit** Outfall Information/Limits Land Application GIS Information

Special Conditions---Permit

Condition	Schedule	Due Date
PRETREATMENT - APPROVED PROGRAM	PRETREATMENT - APPROVED PROGRAM: SUBMIT SIGNIFICANT	06/15/2001
PRETREATMENT - APPROVED PROGRAM	PRETREATMENT - APPROVED PROGRAM: DEVELOP/RE-EVALUA	12/15/2001
PRETREATMENT - APPROVED PROGRAM	1ST YEAR - PRETREATMENT - APPROVED PROGRAM: SUBMIT A	01/15/2001
PRETREATMENT - APPROVED PROGRAM	1ST YEAR - SUBMIT PN FOR SIU'S IN SNC (3/31)	01/15/2002
PRETREATMENT - APPROVED PROGRAM	2ND YEAR - PRETREATMENT - APPROVED PROGRAM: SUBMIT	01/15/2002
PRETREATMENT - APPROVED PROGRAM	2ND YEAR - SUBMIT PN FOR SIU'S IN SNC (3/31)	01/15/2003
PRETREATMENT - APPROVED PROGRAM	3RD YEAR - PRETREATMENT - APPROVED PROGRAM: SUBMIT	01/15/2003
PRETREATMENT - APPROVED PROGRAM	3RD YEAR - SUBMIT PN FOR SIU'S IN SNC (3/31)	01/15/2004
PRETREATMENT - APPROVED PROGRAM	4TH YEAR - PRETREATMENT - APPROVED PROGRAM: SUBMIT A	01/15/2004
PRETREATMENT - APPROVED PROGRAM	4TH YEAR - SUBMIT PN FOR SIU'S IN SNC (3/31)	01/15/2005

Enter value for Condition
Record: 18/? List of Values <QSC> <DBG>

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The pretreatment special conditions are divided into the following three categories:

- Pretreatment - Approved Program
- Pretreatment - Developing Program
- Pretreatment - Conditional Program

POTW Audit Screen

How to Access the POTW Audit Screen:

The POTW Audit Screen is accessed from the CEDS Main Menu using:
Applications\Inspections\Water.

You must then query for a specific individual permit (usually the Control POTW). Click on the Pretreatment Audit button. To begin the query, click on the Query button. The query button then changes to a red check. Click on the red check to complete the query and bring up the data.

Virginia Department of Environmental Quality - [Inspections]

Menu: Action Edit Block Field Record Query CEDS Window Help

Toolbar: [Icons for file operations and navigation]

Inspections

Permit Type: **VPDES** Permit No: **VA0060640** [Download icon]

Facility Name: **North River STP** [Comp. Schedule]

Technical Assistance C.I Recon Diagnostics **Pretreatment** Lab Inspections Sampling Inspections

POTW Audit Industrial User Inspections POTW Annual Report

POTW Audit

Audit Date: **01/31/2001** ☒ Announced Inspection Type: **G** Inspector: **S**

Report Completed Date: **02/08/2001** Report Mailed Date: **02/08/2001**

☐ Follow Up Follow Up Completed Date: []

PTIM: **11/13/19** SIUS: **10** NOIN: **0** MSNC: **0** RDN1: **0** ☒ EVLL

NOCM: **0** CIUS: **2** PSNC: **0** SNIN: **0** ☐ RDN2 ☒ ADLL

Comments: [] [Events]

Audit Date: [] Record: 2/2 [<DSC > <DBG >]

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Audit Screen Data Entry:

The audit screen is used to record the POTW program information determined during the annual audit. The following spaces are found in the audit screen. All blanks must be filled in. (Hint. When you click on the white area of each box, a narrative description pops up at the bottom of the screen.

- a. **Audit Date** - Self explanatory
- b. **Announced** - Check if the POTW received prior notice of the audit
- c. **Inspection Type** - Locked in. No action necessary
- d. **Inspector** - Locked in. No action necessary
- e. **Report Complete date** - Self explanatory
- f. **Report Mailed Date** - Self explanatory
- g. **Follow up** - Check if problems were noted during the audit that require follow-up.
- h. **Follow up Completed** - Check when follow up completed

- i. **PTIM** - Date permit modified to require pretreatment implementation. The PTIM code is the ORIGINAL date the VPDES permit was modified or reissued to require pretreatment program IMPLEMENTATION (as opposed to development). It is a fixed date and does not change.

Clarifying further, the PTIM code is NOT the date DEQ ORIGINALLY approved the pretreatment program. The PTIM does IS the date the permit was ORIGINALLY modified or reissued to require pretreatment program implementation. The POTW would then have 2 years from the date the permit was modified to implement the program.

- j. **SIUS** - Number of significant industrial users
- k. **NOIN** - Number of SIUS not inspected or sampled by POTW in the past year
- l. **MSNC** - SIUs in SNC with self monitoring requirements
- m. **RDN1** - SIUs in SNC without formal (AO or more) enforcement actions
- n. **EVLL** - Has the POTW technically evaluated the need for local limits? Put a check in the box if the answer is "yes". Leave the box blank if the answer is "no".
- o. **NOCM** - SIUs without control mechanisms.
- p. **CIUS** - Categorical industrial users
- q. **PSNC** - SIUs in SNC with pretreatment standards or reporting requirements
- r. **SNIN** - SIUs in SNC with self monitoring requirements and not inspected and/or sampled by POTW in the past year.
- s. **RDN2** - Has the POTW failed to enforce against pass-through or interference? Put a check in the box if the answer is "yes". Leave the box blank if the answer is "no".
- t. **ADLL** - Has the POTW adopted technically based local limits? Put a check in the box if the answer is "yes". Leave the box blank if the answer is "no".
- u. **Comments** - can be used for whatever you chose, or left blank. One useful function here is that you can perform a query for audits conducted during a particular month, for instance, by hitting the action button and entering in "09%", then hitting the red arrow in the tool bar. This should then list all the audits conducted during September. You can scroll back or forward through the query by using the black arrow keys under the tool bar.
- v. **Events Button** - Not mandatory. Can be used if desired. One use is to enter items from the audit identified for follow-up.

POTW Annual Report Screen

The POTW Annual Report Screen is accessed from the CEDS Main Menu using: Applications\Inspections\Water. You must then query for a specific individual permit (usually the Control POTW). Click on the POTW Annual Report button. To begin the query, click on the query button. The query button then changes to a red check. Click on the red check to complete the query and bring up the data.

Virginia Department of Environmental Quality - [Inspections]

Action Edit Block Field Record Query CEDS Window Help

Insert

Permit Type: **VPDES** Permit No: **VA0060640**

Facility Name: **North River STP** **Comp. Schedule**

Technical Assistance C.I Recon Diagnostics **Pretreatment** Lab Inspections Sampling Inspections

POTW Audit Industrial User Inspections **POTW Annual Report**

POTW Annual Report

Report Start Date: **01/01/2000** Report End Date: **12/31/2000**

SSNC: **0** SVPU: **0**

FENF: **18** IUPU: **0**

JUDI: **0** **Events**

Report Start date
Record: 2/2 **<OSC>** **<DBG>**

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POTW Annual Report Data Entry:

The POTW Annual Report screen is used to record the information submitted by the POTW in their pretreatment annual report. The following spaces are found in the Annual Report Screen. All blanks must be filled in.

- Report Start Date** - Start of the annual report period (normally January 1)
- Report End Date** - End of the annual report period (normally December 31)
- SSNC** - SIUs in SNC with pretreatment compliance schedules (CS) , violating CS milestones by 90 days, or violating CS reporting deadlines by 30 days
- SVPU** - SIUs with significant violations in the past year published in local newspapers
- FENF** - Number of NOV's, AO's and equivalent actions issued against SIUs in the past year
- IUPU** - The code is actually IUPN and the IUPU in CEDS is a typographical error. IUPN stands for IUs from which monetary penalties/fines have been collected in the past year
- JUDI** - Number of civil and criminal judicial actions filed against SIUs in the past year
- Events Button** - Can be used to record events

Industrial User Inspections Screen

The Industrial User Inspection Screen is accessed from the CEDS Main Menu using: Applications\Inspections\Water. You must then query for a specific individual permit (usually the Control POTW). Click on the Industrial User Inspections button. To begin the query, click on the query button. The query button then changes to a red check. Click on the red check to complete the query and bring up the data.

Virginia Department of Environmental Quality - [Inspections]

Action Edit Block Field Record Query CEDS Window Help

Previous Record

Inspections

Permit Type: VPDES Permit No: VA0060640

Facility Name: North River STP Comp. Schedule

Technical Assistance C.I Recon Diagnostics Pretreatment Lab Inspections Sampling Inspections

POTW Audit Industrial User Inspections POTW Annual Report

Industrial User: Ariake USA, Inc. User Type: S Inspection Frequency: 5

Inspection Date: 12/08/1998 Previous Inspection Dates: Announced

Edit Inspection Date:

Report Comp. Date: 12/22/1998 Report Mailed Date: 12/22/1998

Follow Up Follow Up Completed Follow Up Completed Date: SNC

Comments: Events

Industrial User

Record: 9/11 <OSC> <DBG>

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Industrial User Inspection Report Data Entry:

The information in this screen should be completed for each IU inspection completed. The following spaces are found in the inspections screen. Fill in as appropriate.

- a. **Industrial User** - Facility Name. If the industrial user changes name, it is recommended that a note be included in the comments section, so that historical information can be found under the old name.
- b. **User Type** - Choose "C" for categorical users; "S" for significant industrial users that are not categorical.
- c. **Inspection Frequency** - Check the required frequency of inspection. Choose "2" for categorical facilities under POTWs with approved programs. Choose "5" for non-categorical significant users. Choose "1" for categorical facilities under conditional programs.
- d. **Inspection Date** - Self explanatory
- e. **Announced** - Check if the facility received prior notice of the inspection
- f. **Report Complete Date** - Self explanatory
- g. **Report Mailed Date** - If you mail a copy of the inspection report to the permittee, fill in that block with the date the inspection was mailed.
- h. **Follow Up** - Check if problems were noted during the inspection that require follow-up.
- i. **Follow Up Completed** - Check when follow up completed
- j. **Follow Up Complete Date** - If problems were noted during the inspection and a response date is designated, put that date in this block. The problem should be listed in the comments section.
- k. **SNC** - Check if the industrial user was determined to be in significant noncompliance (SNC) during the inspection.
- l. **Comments** - use as you wish. Some regional offices use the comment section to record which of the SIUs are currently SIUs for query purposes.

Compliance Schedule Events Screen

The regional offices are responsible for entering into CEDS when special condition items, including pretreatment special conditions, are received and when they are complete.

The Compliance Schedule Events Screen is accessed from the CEDS Main Menu Screen at: Applications\Compliance\Enforcement\Water\Compliance Schedule Events.

Virginia Department of Environmental Quality - [Compliance Schedule Events]

Action Edit Block Field Record Query CEDS Window Help

Compliance Schedule Events

Active History

Permit Type: VPDES Permit No.: VA0025518 Major/Minor: MAJOR

Facility: Moore's Creek Regional STP Prep No.:

Permit Writer: Job Norma,C Permit Inspector: Enforcement Rep.:

Schedule	Document Basis	Effective	Due	Dates Received	Completed	Evaluated	EA Nu
4TH YEAR - PRETREATMENT -		11/30/1999	01/15/2003				
5TH YEAR - PRETREATMENT -		11/30/1999	01/15/2004				
1ST YEAR - SUBMIT PN FOR SI		11/30/1999	03/31/2000	03/30/2000	03/30/2000		
3RD YEAR - SUBMIT PN FOR S		11/30/1999	03/31/2002				
4TH YEAR - SUBMIT PN FOR SI		11/30/1999	03/31/2003				
IT PN FOR SIU'S IN SNC (3/31)		11/30/1999	03/31/2004				

Outfall Level Schedules

Schedule:	Outfall No	Document Basis	Effective	Due	Dates Received	Completed	Evaluated

Enter value for Schedule
Record: 36/? List of Values: <QSC> <DBG>

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Compliance Schedule Events Data Entry:

1. Under Permit Type, pick VPDES
2. Click on the down arrow under permit Number
3. This brings up a box of permit numbers. In the Find Box type in the permit number of the permit you want to select after the % sign. Click on the Find button.
4. You may see the permit listed twice, one for the Active Table and once for the Application Table. Be sure to select the Active Table (the Application Table is for draft permits).
5. Click on OK
6. To execute the query, click in the white space under schedule.
7. This brings up all the special conditions and the due dates that were entered by the permit writer on the permit special conditions screen in the permit Module.
8. Look in the list of special conditions and due dates and find special conditions associated with pretreatment.
9. Enter the date received and the date completed for each pretreatment item with a due date. There is a line for comments if you want to clarify anything.
10. To save, click on the blue disc button.
11. To exit the screen, click on the red door at the far right of the screen.

APPENDIX U – Review of Fundamentally Different Factors Variance Requests

In establishing Categorical Pretreatment Standards for existing sources, the EPA takes into account all the information it can collect, develop and solicit regarding the factors relevant to Pretreatment Standards under Section 307(b). In some cases, information which may affect the Pretreatment Standards will not be available or, for other reasons, will not be considered during their development. As a result, it may be necessary on a case-by-case basis to adjust the limits in Categorical Pretreatment Standards, making them either more or less stringent, as they apply to certain dischargers within an industrial category or sub-category. The modified standard will, in effect, acknowledge that the dischargers in question are fundamentally different from other facilities considered by EPA in developing the Categorical Standards.

Any interested party (including the dischargers or POTW) believing that the factors relating to a discharger are fundamentally different from the factors considered during development of a Categorical Pretreatment Standard applicable to that User may request an FDF. The requestor must submit the request to the Approval Authority and ultimately to EPA for approval. The request must fully document the reasons for the variance and must be submitted within 180 days after the effective date of the Categorical Pretreatment Standard or within 30 days after the final determination has been made on the request for a category determination.

1. The written variance submission is required to contain the following information:
 - a. Requestor's name and address;
 - b. Requestor's interest in variance;
 - c. POTW receiving industrial waste;
 - d. Applicable Categorical Pretreatment Standard;
 - e. List of pollutant or parameter in question;
 - f. Alternative limits proposed for each appropriate pollutant or parameter;
 - g. Description of the existing industrial water pollution control facility;
 - h. Schematic of industrial water system - water supply, process systems and discharge point;
 - i. Clear statement of need for variances - include supportive data, documentation and appropriate evidence such as EPA Development Documents, economic data, legal proceedings, etc.;
 - j. Where control technology recommended will not meet the standard, or exceed the standard, it is essential that adequate documentation be presented.

Requests for variance must be reviewed in detail so as to determine whether or not the factors identified are fundamentally different. The following points are essential for approval of a variance from a Categorical Pretreatment Standard. (Check the promulgated BAT guidelines and development documents in your review).

2. Factors relative to the affected dischargers different from the factors EPA considered. Factors which may be considered as fundamentally different include:
 - a. Fundamental aspects of the industrial process which significantly affect the nature or quantity of the process wastewater discharge;
 - b. Age, size, land and space consideration as related to equipment and facilities, processes utilized and application of control technology;
 - c. Adverse impact on water quality by control technology required to meet a Categorical Standard;
 - d. Increased energy requirements, provided less energy consumptive control technology is not available or applicable;
 - e. Disproportionate compliance costs due to one or more of the above;
 - f. The factors upon which the variance is based existed prior to EPA promulgation of a particular standard;
 - g. Due to the factors in question, the cost of compliance would be grossly disproportionate to the cost EPA considered.
 - h. The alternative pretreatment limits are justified by the extent of the fundamental difference;
 - i. The request for variance is in accordance with the procedures in the Regulations.

The determination on the FDF variance should be made by a technical professional, such as a Sanitary, Environmental or Chemical Engineer. If, after reviewing the FDF variance request, the request is to be denied, a written statement for the Director of Water Resources Management's signature should be issued to this effect. This statement should outline the reasons for denying the request. The statement should be addressed to the requestor with a copy to the Industry if they did not make the request.

If the request should be approved, a written statement should be prepared for the Director of Water Resources Management's signature, and forwarded along with the request and a recommendation for approval and reasons supporting this recommendation, to the EPA.

APPENDIX V – Use of the Combined Wastestream Formula and Flow
Weighted Average Formulas

Federal categorical pretreatment standards regulate the discharge of certain pollutants from a particular industry or industrial process. An important consideration of the categorical standards is that the pollutant limitations specified in the standards apply to the discharge of wastewater from the regulated process only, prior to mixing with any other wastestreams. As such, determination of an industries compliance status should be done by collecting and analyzing a sample of wastewater representing only the discharge from the regulated process.

However, it is often difficult or impossible to collect and analyze a sample of only the wastewater from the regulated process. The categorical discharger may combine some or all of its wastestreams and treat them in a single wastewater treatment facility. Some of the wastestreams may be regulated by one categorical pretreatment standard, while others are regulated by a different categorical standard or not regulated at all.

The combined wastestream formula (CWF), is a mechanism for adjusting the discharge limits (concentration or mass) in categorical pretreatment standards when a regulated process wastestream is combined, prior to treatment, with another wastestream (either regulated or unregulated), resulting in a mixed discharge to the POTW system. The CWF is applied to the mixed discharge to account for the presence of the additional flow contributed by unregulated or dilute wastestreams. The flow-weighted average formula (FWA), is used for adjusting categorical standards where a regulated wastestream is combined with diluting wastestreams after treatment, but prior to an end-of-pipe sampling location.

The intent of establishing the CWF was two-fold. First, and most important, was to account for the dilution of a regulated wastestream by other segmented wastestreams. Although dilution reduces the pollutant concentration, the mass loading of that pollutant to the POTW could increase. Second, the regulation did not want to force industrial users to segregate their process wastestreams (either regulated or unregulated) when there could be some benefit to the treatment of the combined wastestreams. Concurrent pretreatment of the combination of the unregulated and the regulated wastestream could result in an overall decrease in the pollutant loading, whereas no pretreatment of the unregulated wastestream may allow a net increase of the pollutant load in the final discharge to the POTW.

Definitions

Regulated Process Wastestream - an industrial process wastestream regulated by National Categorical Pretreatment Standards.

Unregulated Process Wastestream - an industrial process wastestream that is not regulated by a categorical standard.

NOTE: Definitions apply to individual pollutants. A wastestream from a process may be "regulated" for one pollutant and "unregulated" for another pollutant.

Dilute Wastestream - an unregulated wastestream containing none of the regulated pollutant or only trace amounts of it (i.e., sanitary wastewater, noncontact cooling water and EPA Paragraph 8 excluded wastestreams).

Concentration-based Limit - a limit based on the relative strength of a pollutant in a wastestream, usually expressed in mg/l (lb/gal).

Mass-based Limit - a limitation based on the actual quantity of a pollutant (e.g., pounds or kilograms) in a wastestream per unit of production, usually expressed in mg/square meter of operation or lb/square foot of operation.

1. Conditions for Using the CWF to Calculate an Alternative (Adjusted) Limit

To ensure proper application of the CWF, the following conditions must be met by a municipality and its industries:

- a. Alternative discharge limits that are calculated in place of the promulgated categorical pretreatment standards must be enforced as categorical standards.
- b. Calculation of alternative limits must be performed by the POTW or by the significant discharger with written permission from the POTW.
- c. Alternative limits must be established for each regulated pollutant in each of the regulated processes.
- d. The POTW and/or the significant discharger may use mass-based limitations in place of the concentration-based limitations, as long as an agreement exists between the regulated significant discharger and the POTW that is receiving these wastes.
- e. Both daily maximum and monthly average (usuall monthly) alternative limits must be calculated for each regulated pollutant. If two or more Categorical Standards apply to the facility and one of the processes is regulated by the Standards (daily average and 4-day average) and the other process(es) are regulated by other Standards (regulated by a monthly average limit), then the Standard 4-day average limit must be adjusted to the appropriate equivalent monthly average.
- f. If process changes at an industry warrant, the POTW must recalculate the alternative limits at its discretion or at the request of the significant discharger. The new alternative limits must be calculated and become effective within 30 days.
- g. The POTW may impose more stringent alternative limits, but may not impose alternative limits that are less stringent than the calculated limits.
- h. A calculated alternative limit cannot be used if it is below the analytical detection limit for that pollutant. If a calculated limit is below the detection limits, the significant discharger must either:
 1. Not combine the dilute streams with the regulated streams prior to the combined treatment facility, or
 2. Segregate all wastestreams entirely, or
 3. Implement flow reductions to allow detection.
- i. If a significant discharger needs to segregate its wastestreams because calculated alternative limits are below the detection limit, but the cost to segregate wastestreams is disproportionate to the cost of compliance, the industry may be eligible for further variance from categorical pretreatment standards.

- j. The categorical standards of the regulated wastestreams which are applied to the CWF must be consistent in terms of the number of samples the standard is based on. Electro-plating Point Source Category Pretreatment Standards specify 4-day average limits as opposed to monthly average limits. However, if a non-electroplating wastestream is regulated by a maximum monthly average standard (based on ten sample days), and it is combined with an electroplating wastestream, 30-day average standards rather than 4-day average standards are to be used in calculating an alternative limit with the CWF. If two electroplating wastestreams regulated under different subcategories of the electroplating regulations are combined, the 4-day standards may be used to calculate the alternative limit, unless an additional wastestream subject to monthly standards is added.

COMBINED WASTESTREAM FORMULAS

Alternative Concentration Limit Formulas

$$C_t = \frac{\sum_{i=1}^N C_i F_i}{\sum_{i=1}^N F_i} - F_d$$

C_t = Alternative concentration limit for the pollutant

C_i = Categorical Pretreatment Standard concentration limit for the pollutant in regulated stream i

F_i = Average daily flow (at least 30 day average) of regulated stream i

F_d = Average daily flow (at least 30 day average) of diluted wastestream(s)

F_t = Average daily flow (at least 30 day average) through the combined treatment facility (including regulated, unregulated, and dilute wastestreams)

N = Total number of regulated streams

Alternative Mass Limit Formula

$$M_t = \sum_{i=1}^N M_i \times \frac{F_i}{\sum_{i=1}^N F_i} - F_d$$

M_t = $M_i \times$ = Alternative mass limit for the pollutant

M_i = Categorical Pretreatment Standard mass limit for pollutant in regulated stream i

F_i = Average daily flow (at least 30 day average) of regulated stream i

F_d = Average daily flow (at least 30 day average) of diluted wastestream(s)

F_t = Average daily flow (at least 30 day average) through the combined treatment facility (including regulated, unregulated and dilute wastestreams)

N = Total number of regulated streams

Flow-Weighted Average Formulas

FWA Formula with Algebraic Terms

Equation 1

C_{fwa} = Alternative concentration limit for the pollutant for wastestreams combined after treatment (using FWA)

C_{cwf} = Alternative concentration limit for the pollutant for the effluent from treatment using the CWF

F_t = Average daily flow (at least 30 day average) through the combined treatment facility

n = Number of non-regulated wastestreams

C_{nri} = Concentration of non-regulated wastestream i

F_{nri} = Average daily flow (at least 30 day average) of non-regulated wastestream i

F_t = Average daily flow (at least 30 day average) into regulated monitoring point (generally point of discharge to sanitary sewer)

Equation 2

M_{fwa} = Alternative mass limit for the pollutant for wastestreams combined after treatment using FWA

M_{cwf} = Alternative mass limit for the pollutant for the effluent from treatment using the CWF

M_{nr} = Mass of the pollutant in non-regulated wastestreams

APPENDIX W – Review of Net/Gross Calculations

REVIEW OF NET/GROSS CALCULATIONS

1. Net/Gross Adjustments

Categorical pretreatment standards may be adjusted to reflect the presence of pollutants in an industry's intake water. Any industrial user wishing to obtain credit for intake pollutants must make application to the control authority. Upon request by the industry, the applicable standard will be calculated on a "net" basis that has been adjusted to reflect credit for pollutants in the intake water. However, the industry user must demonstrate all of the following criteria:

- a. Its intake water is drawn from the same body of water into which the discharge from its publicly owned treatment works is made. The Control Authority may waive this requirement if it finds that no environmental degradation will result.
- b. The industrial user must demonstrate that the control system it proposes or uses to meet applicable categorical pretreatment standards would, if properly installed and operated, meet the standards in the absence of pollutants in the intake waters.
- c. The pollutants in the intake water do not vary chemically or biologically from the pollutants limited by the applicable standards.

Intake pollutant adjustments should be calculated on the basis of the amount of pollutants present after any treatment steps have been performed on the intake water by or for the industry. Adjustments will be given only to the extent the pollutants in the intake water which are limited by the standard are not removed by the user's treatment processes.

The Board may require the industry to conduct additional monitoring as necessary to determine continued eligibility for and compliance with any adjustments.

These adjustments will be treated as non-substantial modifications to the POTW's pretreatment program. The POTW must send its decision and rationale on the net/gross adjustment to the DEQ. The DEQ must review the decision and must notify the POTW within 90 days of deficiencies.

APPENDIX X – Review of Solvent Toxic Organic Management Plans
(STOMP)

STOMPs apply to the Electroplating, Metal Finishing, and Electrical and Electronic Components (Phase I & II) categories. The STOMP may serve as an alternative to TTO monitoring. The four other current categories with TTO limits; Aluminum Forming, Copper Forming, Coil Coating (Canmaking subcategory only), and Metal Molding and Casting, have the option of monitoring for oil and grease instead of monitoring for TTO.

Guidance for the Preparation of Solvent Toxic Organic Management Plans (STOMP)

The STOMP should specify the toxic organic compounds used, the method of disposal (instead of dumping into wastestreams), and procedures for assuring that toxic organics are not routinely spilled or leaked into wastewater discharged to the POTW. Guidelines for preparation of a STOMP are presented below in four basic steps:

Step 1 - Process Engineering Analysis

A process engineering analysis should be conducted to determine the source of toxic organic pollutants found in the facility's wastewater discharge and those that could reasonably be expected to enter the wastewater in the event of spills, leaks, etc., based on the type of operations conducted at the particular plant. Such an analysis should be based on the results of one or more analyses of the plant's wastewater for the toxic organic pollutants included in the definition of TTO for that industrial category (see TTO monitoring guidance discussed below). The process engineering analysis should also include:

1. An examination of published reports on the specific industry;
2. A water flow diagram to identify all possible wastewater sources;
3. A list of raw materials used in the industrial processes, including chemical additives, water treatment chemicals and cleaning agents, and the wastewater stream that each material potentially enters;
4. Comparison of the toxics found in the effluent with the list of raw materials and selection of the most probable wastewater source;
5. Evaluation of the toxics found in the effluent, but not on the raw materials list and determination of those formed as reaction products or by-products;
6. Examination of sources such as equipment corrosion or raw material impurities contributing to organics that are toxic pollutants.

Step 2 - Pollutant Control Evaluation

An evaluation should be made of the control options that could be implemented to eliminate each source or potential source of toxic organic pollutant introduction to the treatment system. These options may include in-plant modifications, solvent or chemical substitution, partial or complete recycle, reuse, neutralization, and operational changes. The analysis should be conducted on a case-by-case basis and should result in one or more feasible options to control each source or potential source of toxic pollutant introduction. Finally, evaluation of the available control options

including the advantages and disadvantages of each leads to a decision of whether a solvent/toxic organics management plan is a feasible alternative to TTO control and monitoring and, if so, will lead to selection of that plan.

Step 3 - Preparation of Solvent/Toxic Organics Management Plan

The solvent/toxic organics management plan should document:

1. The identification of source(s) of pollutant(s);
2. Control options explored;
3. Effectiveness of control options in meeting effluent limits;
4. Categorical discharger's choice of options and the projected schedule for achieving necessary control.

A solvent/toxic organic pollutant management plan should include at a minimum the following items:

1. A complete inventory of all organic chemicals used in the industrial facilities, or found through sampling and analysis to be present in the wastewater from process operations (organic constituents of trade-name products should be obtained from the appropriate suppliers as necessary);
2. Descriptions of the methods of disposal other than dumping used for the inventoried compounds, such as reclamation, contract hauling, or incineration;
3. The procedures for ensuring that the organic pollutants listed do not spill or routinely leak into process wastewaters, non-contact cooling water, groundwater, or surface waters (i.e., Spill Prevention, Control and Countermeasures (SPCC) Plan; and
4. Determinations or best estimates of the identities and approximate quantities of organic pollutants used in, as well as discharged into the wastewaters from, the manufacturing processes.

Compounds present in wastestreams that are discharged to sanitary sewers may be a result of regulated processes or disposal, spills, leaks, rinse water carryover, wet air pollution control, and other sources.

Step 4 - Submission of Solvent Toxic Organic Management Plan and Certification Statement

The STOMP should be submitted to the Board's staff at the time the baseline monitoring report is required if the Industries' initial election is to choose this option. Alternatively, an Industrial User may submit a STOMP at any later time and request that TTO self monitoring requirements be discontinued upon approval and implementation of the STOMP. A prerequisite for use of the certification approach should be a fully approved, implemented, and ongoing solvent/toxic organic management plan. In addition, a certification statement should be required both at the time of submission and with each periodic Industries' report (i.e., semi-annual report). It should be signed by an officer of the company or manager responsible for overall plant operations. A statement such as the following should be required:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the TTO

limitations, I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last report. I further certify that this facility is implementing the toxic organic pollutant management plan submitted to the POTW on

Date

Officer

If the user is unable to make the above certification statement, the user should notify the POTW sixty (60) days prior to the due date for filing the compliance reports. At that time, the Control Authority should determine the appropriateness of requiring sampling and analysis for specific toxicants and notify the user accordingly.